REVISED SUPPLEMENT,

1917,

RELATING TO THE

MEDITERRANEAN PILOT, VOL. I.

FIFTH EDITION,

1913.

(Corrected to 8th February, 1917.)

PUBLISHED BY ORDER OF THE LORDS COMMISSIONERS OF THE ADMIRALTY.

LONDON:
PRINTED FOR THE HYDROGRAPHIC DEPARTMENT, ADMIRALTY,
UNDER THE AUTHORITY OF HIS MAJESTY'S STATIONERY OFFICE,
BY TAYLOR, GARNETT, EVANS, & CO., LTD.,
ALSO AT MANCHESTER AND BEDFORD;
AND TO BE OBTAINED FROM
J. D. POTTER, AGENT FOR THE SALE OF ADMIRALTY CHARTS,
145, MINORIES, E.C.

1917.

Gratis to Purchasers of the Mediterranean Pilot, Vol. I.

CAUTION WHEN APPROACHING BRITISH PORTS.

(To be inserted inside cover of all Sailing Directions.)

PART I.—CLOSING OF PORTS.

(1) My Lords Commissioners of the Admiralty having taken into consideration the fact that it may be necessary to forbid all entrance to certain ports of the Empire, this is to give Notice that on approaching the shores of the United Kingdom, or any port of the British Empire, a sharp lookout should be kept for the signals described in the following paragraph, and for the vessels mentioned in paragraph (4), Part II., of this Notice, and the distinguishing and other signals made by them. In the event of such signals being displayed, the port should be approached with great caution, as it may be apprehended that obstructions may exist.

(2) If entrance to a port is prohibited, three *red* vertical lights by night, or three *red* vertical balls by day, will be exhibited in some conspicuous position in or near to its approach, which signals will also be shown by the vessels indicated in paragraph (4), Part II., of this Notice.

If these signals are displayed, vessels must either proceed to the position marked "Examination Anchorage" on the Admiralty Charts and anchor there, or keep the sea.

PART II.—EXAMINATION SERVICE.

(3) Under certain circumstances, it may become necessary to take special measures to examine vessels desiring to enter the ports or localities at home or abroad, referred to in Notices to Mariners No. 1 of 1916 and subsequent years.

(4) In such case, vessels carrying the distinguishing flags or lights mentioned in paragraph (6) will be charged with the duty of examining ships which desire to enter the ports and of allotting positions in which they shall anchor. If Government vessels, or vessels belonging to the local port authority, are found patrolling in the offing, merchant vessels are advised to communicate with such vessels with a view to obtaining information as to the course on which they should approach the Examination Anchorage. Such communication will not be necessary in cases where the pilot on board has already received this information from the local authorities.

(5) As the institution of the Examination Service at any port will never be publicly advertised, especial care should be taken in approaching the ports, by day or night, to keep a sharp lookout for any vessel carrying the flags or lights mentioned in paragraph (6), and to be ready to "bring to" at once when hailed by her or warned by the firing of a gun or sound rocket.

In entering by night serious delay and risk will be avoided if four efficient all round lamps, two *red* and two *white*, are kept available for use.

(6) By day the distinguishing flags of the Examination Steamer will be a special flag (white and red horizontal surrounded by a blue border) and a blue ensign.

Also, three *red* vertical balls if the port is closed.

By night the steamer will carry: (*a*) Three *red* vertical lights if the port is closed; (*b*) three *white* vertical lights if the port is open.

The above lights will be carried in addition to the ordinary navigation lights, and will show an unbroken light around the horizon.

(7) Masters are warned that, when approaching a British port where the Examination Service is in force, they must have the distinguishing signal of their vessel ready to hoist immediately the Examination Steamer makes the signal.

(8) Masters are warned that, before attempting to enter any of these ports when the Examination Service is in force, they must in their own interests strictly obey all instructions as to entry given to them by the Examination Steamer. In the absence of any instructions from the Examination Steamer they must proceed to the position marked "Examination Anchorage" on the Admiralty Charts, and anchor there, or keep the sea.

Whilst at anchor in the Examination Anchorage, Masters are warned that they must not lower any boats (except to avoid accident), communicate with the shore, work cables, move the ship, or permit anyone to leave the ship, without permission from the Examination Steamer.

(9) In case of fog, Masters of vessels are enjoined to use the utmost care, and the Examination Anchorage itself should be approached with caution.

(10) Merchant vessels when approaching British ports are specially cautioned against making use of private signals of any description, either by day or night, the use of them will render a vessel liable to be fired on.

(11) The pilots attached to the ports will be acquainted with the regulations to be followed.

REVISED SUPPLEMENT,

1917,

RELATING TO THE

MEDITERRANEAN PILOT, VOL. I.

FIFTH EDITION,

1913.

(CORRECTED TO 6TH FEBRUARY, 1917.)

PUBLISHED BY ORDER OF THE LORDS COMMISSIONERS OF THE ADMIRALTY.

LONDON:
PRINTED FOR THE HYDROGRAPHIC DEPARTMENT, ADMIRALTY,
UNDER THE AUTHORITY OF HIS MAJESTY'S STATIONERY OFFICE,
BY TAYLOR, GARNETT, EVANS, & CO., LTD.,
ALSO AT MANCHESTER AND REDDISH;
AND TO BE OBTAINED FROM
J. D. POTTER, AGENT FOR THE SALE OF ADMIRALTY CHARTS,
145, MINORIES, E.C.

1917.

Gratis to Purchasers of the Mediterranean Pilot, Vol. I.

ADVERTISEMENT TO REVISED SUPPLEMENT.

This Revised Supplement, compiled by Captain C. H. C. Langdon, R.N., contains the latest information received in the Hydrographic Department since the publication, in 1913, of the Fifth Edition of the Mediterranean Pilot, Vol. I.

It must be remembered that during the present hostilities many of the aids to navigation referred to in the Mediterranean Pilot, Vol. I., and this Revised Supplement, have been discontinued or modified without notice.

All details of lights and fog signals have been omitted; for these the Admiralty List of Lights must be consulted.

Entirely new information not given in the Supplement, 1916, is indicated by a black marginal line.

Paragraphs omitted, excepting lights and fog signals, are denoted by a bracket extending across the page.

Portions of paragraphs omitted, by a bracket three-quarters of an inch long.

Supplement, 1916, and all Notices to Mariners relating to the above work, up to and including No. 122 of 1917, are hereby cancelled.

J. F. PARRY,
Rear Admiral
and Hydrographer.

Hydrographic Department,
Admiralty, London,
8th February, 1917.

(4903) Wt. 56920/584 (16). 5,000.—3/17. T.G.E.

The existence of this Revised Supplement is to be entered in the tabular form inside the cover of the Mediterranean Pilot, Vol. I. The information in it is to be carefully considered.

One copy is to be retained intact for reference, notations referring to it being made in the pages of the Mediterranean Pilot, Vol. I.; the other copy may be cut up, if considered desirable, the slips being pasted in the volume at the appropriate place.

REVISED SUPPLEMENT,

1917,

RELATING TO THE

MEDITERRANEAN PILOT, VOL. I.

For all details of the Lights and Fog Signals which are included in this work, seamen should consult the Admiralty List of Lights, Part V. This List is published early in every year, corrected to the preceding 31st December.

All bearings are True.

CHAPTER I.

Page 6.—Line 19: *For* "three" *read* "four."

Page 11.—Line 13: *Omit* from "Tarifa" to "between" on line 14. This cable has been abandoned.

Page 12.—Line 5 from bottom: *For* "1910" *read* "1914."
Line 4 from bottom: *For* "325,703" *read* "336,000."

Page 14.—Bottom line: *For* "1910" *read* "1914."

Page 15.—Line 1: *For* "£264,725" *read* "£218,065."
Line 3: *For* "£420,552" *read* "£933,489."

Page 18.—Population.—In 1913 the total population numbered 5,654,895, of whom 662,317 were French or naturalised French and 4,778,347 were non-Europeans.

Trade.—In 1913 the value of the exports was £22,517,000, and the imports £29,164,000.

Shipping.—In 1913, 5,960 vessels entered the ports of Algeria, with a total tonnage of 7,174,509 tons.

Page 19.—Communications.—*Omit* "Compagnie Mediterranée de Navigation, Vapeur de Charge Francaise, Deutsche Levante line, A. de Freitas," and *add* "Les Chargeurs Algeriens Reunis, Algerian ports, Marseille, Cette, Toulon, and Nice; Compagnie Schiffino, Algerian and Tunisian ports; Services Côtiers a vapeur, Algerian ports; Le Quelles et Fils, Algiers, Oran, Rouen; Compagnie Pacquet, Casablanca, Tunis, Algiers; Service Franco Algerien, Cette, Algiers; Ligne Cettoise de navigation a vapeur, Cette, Algiers, and Algerian ports; Papyanni and Ellerman lines, Liverpool, Algiers, Malta, Odessa or Alexandria; Nederland line, Amsterdam, Southampton, Lisbon, Tangier, Algiers (passengers only), Genoa, Java; Det Fornede Dampskibs Selskab, Copenhagen, Baltic, Algiers; West Hartlepool line, West Hartlepool, Algiers, Basra; Cunard and White Star lines, Mediterranean ports (passengers only)."

Railways.—Paragraph 3: *After* "Berroughia" *add* "and Boghar."

Paragraph 5: *After* "Biskra (125½ miles)" *add* "Touggourth (133 miles)."

Page 20.—Paragraph 2: In 1913 there were 2,193 miles of railway in Algeria.

Telegraphs.—*Omit* "and two to Bizerta." The cables from Bona to Bizerta no longer exist.

Page 22.—Population.—In 1911 the population was estimated at 1,953,000, of which 126,265 were Europeans.

Trade.—In 1913 the value of the exports was £7,146,544, and the imports £5,770,187.

Shipping.—In 1913, 4,278 steam vessels, with total tonnage of 4,520,330 tons, and 8,009 sailing vessels, of total of 145,890 tons, entered the ports of Tunis.

Page 23.—Communications.—*Add*: The Compagnie des Affreteurs Reunis, Rouen, Algiers, Tunis, and back, monthly; and Bordeaux, Algiers, Bizerta, Tunis, and back, monthly.

Compagnie Daher, Marseille and back, *viâ* Tunis (irregular).
Compagnie a Deppe, Antwerp, Turkey, Alexandria, Tunis, monthly.

Page 23 continued.

Det Fornede Dampskibs Selskab, Antwerp, Algiers, Tunis, Genoa, Leghorn, Palermo, Antwerp, monthly.

Railways.—*After* "Susa" *add* "Malidia and Sfax. The line from Susa, through Sheitla, has been completed to Metlaoui (1915)."

Telegraphs.—*Omit* paragraph, *substituting*:—

There is a submarine cable from Bizerta to Tunis. The other cables have been removed.

Page 27.—Lines 5 and 6: *For* "three" *read* "four."

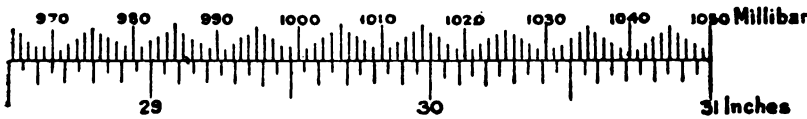
Page 29.—Sicily.—Trade.—The total imports of coal in 1913 was 726,553 tons.

Shipping.—In 1913, 10,481 steam vessels, of a total tonnage of 11,976,667 tons, entered the ports of Sicily.

Page 30.—Railways.—In 1913 there were 793 miles of broad gauge, and 46 of narrow gauge railways, in Sicily.

There is a train ferry service across the Straits of Messina, distance about 14½ miles.

Page 43.—Barometer.—*Add*: The following scale will be useful for converting inches into millibars, and the converse.



Page 59.—Italy.—Pilotage regulations.—Distinguishing marks.—Italian pilot vessels are painted black with a white band, and the word "Pilota," with number, if any, painted in white on each bow and on the stern. The letter "P" is painted on each side of her sail, or funnel if a steam vessel.

Each pilot vessel shows a distinctive flag at the masthead, blue-white-blue, vertical stripes, with the letter "P" in blue on the white stripe.

A vessel requiring a pilot shall make one of the following signals by day:—

1. The national flag with a white border.
2. International code signal P.T.
3. International code flag S. with or without the pennant above it.

By night:—

1. Burn a fountain light every 15 minutes.
2. Show a brilliant white light for periods of about one minute, with short intervals between each period, just above the ship's side.

The pilot vessel will answer by hoisting and lowering her distinctive flag several times if by day, or by showing a flashing lamp at short intervals if by night.

Railways.

Telegraphs.

Page 27.

Page 29.—Sicily.—Trade.

Shipping.

Page 3.—Railways.

Page 45.—Barometer.

Page 30.—Italy.—Pilotage regulations.—Distinguishing marks.—[illegible] a pair of lines with a [illegible] for [illegible] and the word "Italia" with number in [illegible] printed in white on [illegible] ground on the stern. The letter "P" [illegible] on each side of her [illegible] or [illegible] a steamer [illegible].

Each pilot vessel shows a distinctive flag [illegible] white, blue, vertical stripes, with a letter "P" in blue on the white stripe.

A vessel requiring a pilot shall [illegible] the following signals by day:

1. The national flag with a white [illegible].
2. International code [illegible] "G" [illegible].
3. International code [illegible] "P" [illegible] the position [illegible] it.

By night:

1. [illegible] a rocket [illegible] every 15 minutes.
2. [illegible] a bright white light for [illegible] about one minute, with short intervals between each [illegible] just above the [illegible] side.

The pilot vessel makes over by hoisting and lowering her distinctive flag several times if by day, or by showing a flashing lamp at short intervals if by night.

Page 59 continued.

Pilots may not perform towing services without proper licence, and pilots are forbidden to transport persons or stores unless in exceptional circumstances.

The pilotage dues include mooring the vessel if it is done within prescribed limits of time, and the vessel may demand the assistance of the pilot vessel, if necessary, on adequate payment.

The ordinary detention fee for the pilot is 10 lire a day, with food and lodging.

If a ship is detained under circumstances out of the control of the ship's authorities, the detention fee only is payable in addition to the ordinary fees.

Special fees are charged if a pilot is engaged beforehand to go out and meet the vessel, or if a pilot is called to establish communication only.

The pilot, if called, is entitled to his fee whether his services are made use of or not.

If a pilot is retained for leaving, as well as entering, half fees only are charged on leaving.

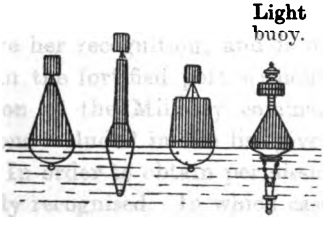
The bill for pilotage is presented on a special form torn from a counterfoil, and is countersigned and presented by the Maritime Authority.

Page 62.—Spanish uniform system of buoyage.—In accordance with the agreement at the International Maritime Conference of March, 1912, the following alterations have been made in the Spanish uniform system of buoyage:—

1. Starboard marks are painted black.
2. Port marks are painted red.
3. Separation marks are surmounted by a black diamond.
4. Junction marks are surmounted by two red cones, vertices together.
5. Isolated danger marks will be surmounted by a black globe.
6. Light-buoys marking wrecks will show a *white* light.

Illustration of system.—*Cancel* the six illustrations on pages 62 and 63, *substituting* the following:—

PORT HAND BUOYS.



STARBOARD HAND BUOYS.

Railways.—[illegible]

Telegraphs.—[illegible]

Page 27.—[illegible]

Page 29.—**Sicily.**—**Trade.**—[illegible]

Shipping.—[illegible]

Page 30.—**Railways.**—[illegible]

Page 45.—**Barometer.**—[illegible]

Page 55.—**Italy.**—**Pilotage regulations.**—**Distinguishing marks.**—[illegible] for vessels are painted black with a white [illegible] and the word "Italy" with number in sure [illegible] [illegible] The letter "P" [illegible] side of [illegible] or [illegible] a [illegible].

Each pilot vessel shows a distinguishing [illegible] white [illegible], vertical stripes, and a letter "P" [illegible] on the white stripe.

A vessel requiring a pilot [illegible] the following signals by day:

1. The national flag with a white [illegible].
2. International code signal [illegible].
3. In emergency [illegible] the pilot [illegible] it.

By night:

1. [illegible] every 15 minutes.
2. [illegible] a bullseye, white light for period of about one minute, with short intervals between each period, just above the [illegible].

The pilot vessel will answer by hoisting and lowering her distinctive flag several times if by day, or by showing a flashing lamp at short intervals if by night.

Page 59 continued.

Pilots may not perform towing services without proper licence, and pilots are forbidden to transport persons or stores unless in exceptional circumstances.

The pilotage dues include mooring the vessel if it is done within prescribed limits of time, and the vessel may demand the assistance of the pilot vessel, if necessary, on adequate payment.

The ordinary detention fee for the pilot is 10 lire a day, with food and lodging.

If a ship is detained under circumstances out of the control of the ship's authorities, the detention fee only is payable in addition to the ordinary fees.

Special fees are charged if a pilot is engaged beforehand to go out and meet the vessel, or if a pilot is called to establish communication only.

The pilot, if called, is entitled to his fee whether his services are made use of or not.

If a pilot is retained for leaving, as well as entering, half fees only are charged on leaving.

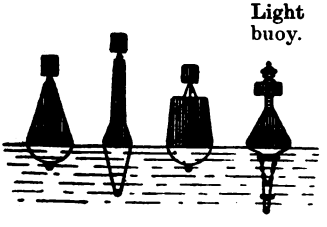
The bill for pilotage is presented on a special form torn from a counterfoil, and is countersigned and presented by the Maritime Authority.

Page 62.—Spanish uniform system of buoyage.—In accordance with the agreement at the International Maritime Conference of March, 1912, the following alterations have been made in the Spanish uniform system of buoyage:—

1. Starboard marks are painted black.
2. Port marks are painted red.
3. Separation marks are surmounted by a black diamond.
4. Junction marks are surmounted by two red cones, vertices together.
5. Isolated danger marks will be surmounted by a black globe.
6. Light-buoys marking wrecks will show a *white* light.

Illustration of system.—*Cancel* the six illustrations on pages 62 and 63, *substituting* the following:—

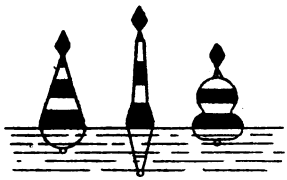
PORT HAND BUOYS.



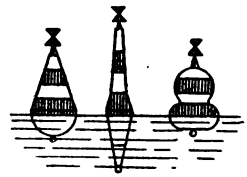
STARBOARD HAND BUOYS.

Page 62 continued.

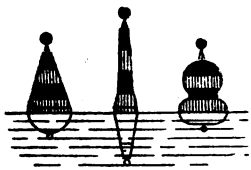
SEPARATION MARKS.



JUNCTION MARKS.

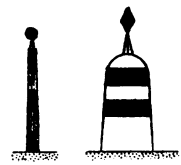


ISOLATED DANGER MARKS.



WRECK BUOY.

BEACONS.



Page 64.—Line 7: *After* "war" *insert* "Also concerning the temporary closing of French ports for exercises, manœuvres, &c."

Page 65.—Italy.—*Cancel* from "In time of war" on last line of page 65 to "justify" on line 14 of page 66, *substituting*:—

Regulations with regard to vessels approaching fortified ports in a state of war.—1. The Military commander of a fortified port in a state of war may, if the circumstances so require, order all foreign men-of-war, as well as foreign and Italian merchant vessels, anchored within the fortified zone, to proceed to sea or move elsewhere, leaving the waters adjacent to the port free for a distance of 10 miles. Vessels receiving such directions are bound to move within a maximum period of 12 hours from the time the order is delivered on board their ships. The Military commander will provide tugs for such vessels as are not in a state to put to sea within the limits of time specified, and will conduct them to some other place, according to the exigencies of the port. In the event of a refusal to leave the port the Military commander may have recourse to such means as the necessities and urgency of the case may require.

2. Any vessel which approaches during the day any fortified port in a state of war, either for the purpose of approaching it or merely because her track leads within the 10-mile limit, is to take steps to ensure her recognition, and is not to proceed towards the anchorage within the fortified port without having previously received the permission of the Military commander through one of the semaphore stations included in the list given in Article 10.

3. In order to obtain permission to enter, vessels must first be completely recognised. In which case they may proceed towards the space comprised within the limits specified in the list given in Article 10,

Page 65 continued.

but must stop when within sight of the defence works, and keep flying in an elevated position the national flag and the ship's name in the International code, to which is to be added the pilot flag and the International code signal P.D., "I request permission to enter." Permission may also be asked by wireless, but this does not relieve a vessel of the necessity of stopping on arriving at the limits hereinafter described, and waiting for a reply.

4. The Military commander will decide whether or not permission to enter is to be given to vessels which have complied with the foregoing article, and is to take into consideration that the presence of such vessel within the port is not to be allowed to subsequently interfere with or obstruct its means of defence.

5. The semaphore station which shall have received, by means of wireless or other signals, the request to enter, will give immediate notice to the Military commander, notifying him of such information as the officer in charge of the station may deem useful, such as the name of the vessel, nationality, distance, bearing, &c.

If the Military commander does not consider it convenient for authorisation of entry to be given, he will cause the signal "U.S.X." to be made:—"Sorry I am unable to comply with request."

The above reply may also be sent by wireless if the request has been made in a similar way.

If consent is given a pilot will be sent. An official will also be sent in the case of neutral men-of-war or suspected vessels, such official being specially charged with the duties of recognising the vessel by inspection and by boarding her. In such cases the inspecting officer is given authority to give or refuse leave to enter, according to the results of his visit. If the foregoing visit cannot be made on account of the state of the sea, right of entry will be refused to neutral men-of-war or to foreign or Italian merchant vessels, unless they are in obvious danger. Under the authorisation of the Military commander a special system of signals will be drawn up, whereby the inspecting officer or the pilot may send through the semaphore station such information as may be useful or urgent. One of these signals is that the vessel has been subjected to a visit, and another that the pilot has gone aboard, but the signal indicating that a vessel has received permission to enter and proceed to her anchorage, which signal varies from day to day, will be hoisted without fail in an elevated position from which it is easily visible to semaphore stations and defence vessels.

6. By night all entry into maritime ports is absolutely forbidden. Permission is only granted to Italian men-of-war and to vessels of an allied Power under the following circumstances:—

(*a*) Pursuit.

(*b*) Grave damage to the hull or vital parts.

(*c*) Stress of weather.

Page 66.—Vessels of war.—Article 2: *Omit* from "Genoa" to "Naples," and *substitute*: "La Maddalena (in the anchorage in the archipelago), Messina (in the anchorage), Palermo."

Page 73.—Marks for tunny nets.—*Omit* the paragraph commencing "In Sicily and Sardinia," and *substitute*:—

"Throughout the coasts of the kingdom of Italy the following rules will be observed for marking the tunny fisheries:—

1. Tunny fisheries proper:—

(*a*) The point at which the nets are attached to the shore will be marked by a mast not less than 33 feet in height, surmounted by a disc 6 feet in diameter, painted in concentric white and black bands, and exhibiting by night *two fixed white* lights, 6 feet apart, and visible at a distance of at least 2 miles.

(*b*) The outer left-hand extremity of the nets, as seen by an observer situated at the point at which the nets are attached to the shore, will be marked by a buoy, boat, or floating mark, surmounted by a spar 16 feet in height, carrying by day two black balls placed vertically 6 feet apart, and by night two lights placed vertically 6 feet apart, the upper *green*, the lower *white*, visible in clear weather at a distance of at least 2 miles.

(*c*) The outer right-hand extremity of the nets, as seen by an observer placed as in (*b*), will be marked by day in a manner identical with the above (a mast and two balls), and by night by two lights placed vertically, 6 feet apart, the upper *red*, the lower *white*, and visible in clear weather at a distance of at least 2 miles.

The above-mentioned marks will be on the outermost limit of the tunny nets, or placed outside it should the lights be a hindrance or obstacle to the fishing.

2. Smaller tunny fisheries:—

(*a*) The point where the nets are attached to the shore will be marked as above.

(*b*) The outer end of the nets will be marked by day by a buoy, boat, or other floating mark surmounted by a mast 16 feet in height, with two discs placed vertically, 6 feet apart, and by night by two lights placed vertically, 6 feet apart, the upper *red*, the lower *white*, visible at a distance of 2 miles.

3. Tunny fishery nets laid out in an anchorage:—

In addition to the foregoing signals, every anchor for nets will be marked by a buoy, or other conspicuous mark.

CHAPTER II.

Chart 142, Strait of Gibraltar.

Page 88.—Cabezos shoals.—Directions.—At night.— *Omit "occulting."* Tarifa light has been altered in its characteristics, and a subsidiary light has been established in the lighthouse which shows a *red* sector over the Cabezos shoals.

Page 89.—Tarifa light has been altered. *See* Light list.

Bell-buoy.—*Omit* paragraph. The bell-buoy formerly at a distance of 2 cables, 208° true, from Tarifa point lighthouse has been removed.

Chart 1448, Acebuche point to Chullera point, &c.

Page 92.—Line 3 from bottom: *For* "269°" *read* "271°."

Page 93.—Pearl rock.—Clearing marks.—At night.— *Omit* the first two lines of paragraph. The new light on Tarifa lighthouse is visible over the Pearl rock.

Plan of Algeciras on 1448.

Page 94.—Galera rock.—*Cancel* paragraph.

Buoy.—*Cancel* paragraph.—This buoy has been removed.

Page 95.—Shoals.—*Omit* from "at one cable" to "$3\frac{1}{4}$ fathoms." Alfonzo XIII. mole has been built on the position of Galera rock and bank.

Line 3: *For* "$2\frac{1}{2}$" *read* "$4\frac{3}{4}$."
Line 6: *For* "$3\frac{1}{2}$" *read* "$3\frac{3}{4}$."

Buoy.—*Cancel* paragraph. The Barranco shoal buoy has been removed.

Algeciras.—Harbour improvements.—Extensive works have been planned, and are in progress, for the improvement of the port of Algeciras.

The Alfonzo XIII. mole, on the north side of the Rio Miel, has been carried out nearly 400 yards from the entrance to the river, and a boat camber provided on its north side. A breakwater 700 yards long is to be built out from the point half a mile to the northward of the river entrance extending eastward to the Barranco shoal. Another breakwater, 1,400 yards long, is to be built out from Verde island, curving to the northward to a point about 4 cables, 107° true, from Barranco shoal. The shore between the river and the north breakwater is to be reclaimed, and formed into a quay. A mole about 500 yards long is also to be built out from Rodeo point.

Page 96.—Lights.—Lights are shown from the extremity of Alfonzo XIII. mole, and from the camber to the northward.

Plan 144, Gibraltar.

Page 99.—Mooring buoy.—A mooring buoy has been established at a distance of $2\frac{3}{4}$ cables, 246° true, from the dockyard clock tower for the use of the Examination vessel.

Plan 144, Gibraltar.

Page 102.—Current indicator.—The current indicator has been temporarily removed.

Page 104.—Examination anchorage.—*Add*:—

Caution.—Mariners are hereby warned that, under no circumstances should vessels anchor to the southward of the southern limit of the area marked "Examination Anchorage" on the charts, and in the event of this anchorage being fully occupied, vessels should remain under way outside.

Buoys.—The north-west corner of the Examination anchorage is marked by a light-buoy exhibiting an *occulting green* light, situated at a distance of 6 cables, 270° (*N. 76° W. Mag.*), from the lighthouse on the head of the South mole; a black mooring buoy for the Examination service vessel is moored off the south-east corner of the above anchorage, in the position shown on the charts.

Line 14 from bottom: *For* "2½" *read* "3."

Page 106.—Directions.—*After* line 6 *add*: "Caution.—Passing vessels should at all times give the entrances to Gibraltar harbour a good berth."

Page 108.—Trade.—In 1914, 276,445 tons of coal was supplied to 2,039 passing vessels, and 3,430 steam vessels, of total tonnage of 5,870,094 tons, and 284 sailing vessels of total tonnage of 19,478 tons, entered the port of Gibraltar.

Page 109. — Cape Spartel. — Line 1: *For* "Raz-al-Shukkar" *read* "Ras Ashakkar."

Plan 1912, Tangier bay.

Page 111.—Judios bay.—Line 3: The Arabic name of Judios rivulet is Wad-el-Yahoud.

Page 112.—Line 18: *After* "tower" *add* "A lazaretto has been built beyond the fort, and is a prominent object."

Line 20: This red iron chimney is no longer a sufficiently distinctive mark, others in the vicinity being more prominent.

Page 113.—Signals.—The signal mast formerly near the lighthouse, has been removed, and is now placed at the eastern end of the large warehouse in the port.

Page 114.—Jetty.—The depth at the inner steps at low water is 6 feet. The crane has been removed, and a small watch-house built at the end of the jetty.

A new jetty of reinforced concrete is to be built a short distance to the south of the present jetty. It will have a crane capable of lifting 30 tons at its extreme, and two smaller ones farther in.

Buoys.—*Omit* the second and third paragraphs, and *substitute*:—

A large black buoy, with a black and white horizontally-striped staff, with "cable" in white letters on it, is moored on the eastern

Page 114 continued. Plan 1912.

side of the anchorage, $1\frac{1}{10}$ miles, 272° true, from Fort Khandouri. Vessels are prohibited from anchoring eastward of this buoy.

A black and white vertically striped buoy marks the British cable, in about 12 fathoms, 333° true, distant about one mile from Fort Khandouri (Ghandouri).

Anchorage.—Disused (sunken) moorings lie nearly 8 cables, 93° true, from Tangier mole; vessels are cautioned against anchoring near the position.

Bottom line: *Omit* from "Battery light" to "buoy" on line 2 of page 115, *substituting* "Outer end of Tangier mole bearing 272° true, distant $7\frac{9}{10}$ cables, this position is marked foul ground on the chart." The small cask buoy no longer exists.

Page 115.—Town.—The clock tower of the Roman Catholic cathedral, which is lighted at night, is a prominent object. The European population is now (1914) estimated at 12,000.

The gates of the town are no longer closed at night.

Page 116.—Communication.—*Omit* lines 1 to 3, *after* "Madeira." The Peninsular and Oriental Company's steamers call at Tangier once a fortnight on outward and homeward voyages. The Power Steamship Company's steamers also call. Several French, Spanish, Dutch, and Italian lines also call regularly.

Messrs. Mateos & Son's steamers no longer call at Tangier, but the Correos de Africa Spanish mail steamers run daily each way except on Sundays.

Trade.—In 1913 the value of exports was £136,331, and of imports £978,173.

Shipping.—In 1913, 2,303 steamers, totalling 2,065,363 tons, and 295 sailing vessels, totalling 23,653 tons, entered the port. The importation of all explosives and materials for their manufacture, as well as tobacco, cigars, and cigarettes, is also prohibited.

Coal.—The coal lighters measure 20 to 55 tons.

Supplies.—Water said to be of good quality is brought in pipes to the end of the jetty, and thence in steam tanks of 65 to 75 tons to the ships.

Plan 2742, Ceuta bay.

Page 123.—Fog signal.—The fog signal at Ceuta is now established at Fort el Hacho.

Harbour works.—*Cancel* the two paragraphs, and *substitute*:

An artificial harbour is under construction (1915) in Ceuta bay, between Benitez point on the western side and a position westward of Fort el Hacho, about 500 yards south of Mocha tower, on the eastern side. The harbour will be formed by the western breakwater extending from Benitez point about 300 yards north-eastward, to Campo rocks, 300 yards east-north-eastward, 300 yards eastward, then turning for

Page 123 continued. Plan 2742.

600 yards south-eastward, and finally about 400 yards eastward, ending at a point about 1,500 yards, 82° true, from Benitez point, and the eastern breakwater, which, starting from the eastern shore, as above, and extending for about 700 yards westward towards the end of the western breakwater, will leave an entrance about 350 yards in width.

An inner harbour will be formed by a spur extending southward from the last elbow of the western breakwater and a mole extending north-eastward from the west end of the town.

The western breakwater has been completed for about 800 yards, and the eastern for about 300 yards. A stone pier and camber have also been built at the inner end of the East breakwater.

The area enclosed will have a depth of from 9 to 3 fathoms outside a cable from the shore.

Page 124.—Line 8: *For* "northern" *read* "western."

Lights.—Lights are also shown from the extremities of the breakwaters, under construction, moved forward as the work progresses.

A light of very low power is shown from the Commercial mole, near Government house.

A light was to be exhibited on the extreme of the Alfonzo XIII. mole on 15th December, 1916. (Moles are not named on our charts.)

Light-buoy.—A light-buoy, exhibiting an *occulting red* light *every ten seconds*, duration of eclipse *five seconds*, is established in 10 fathoms 55 yards north-westward from the position of the head of the eastern mole, when completed, as charted. Vessels must not pass between the light-buoy and the light on the eastern mole.

Line 21: *For* "north" *read* "eastern," and *for* "two buoys" *read* "a buoy."

Line 22: *Omit* from "There is also" to end of paragraph. This buoy no longer exists.

Shoal.—A rocky shoal, known as Salmonete shoal, with depths of $2\frac{3}{4}$ fathoms, lies one cable north-north-westward of the north corner of the head of the Commercial mole, with $3\frac{1}{2}$ fathoms round it.

Plan 1848, Port Malaga.

Page 134.—Line 5 from bottom: *For* "8" *read* "6."

Page 135.—Line 1: *Omit* "can go alongside in any part, and," *substituting* "can berth in the outer portion of the harbour. Vessels".

After line 2 *add*:—

No vessel can lie alongside the eastern mole, as on account of the slope of the mole shoal water extends 25 feet from the foot. The bottom of both outer and inner harbours is of black mud, consequently weighing anchor is a long process, to allow for cleaning the cables.

Port Malaga.—Light near San Nicolas battery. Character altered.

Chart 773, Gibraltar to Adra.

Page 141.—Port Motril.—Pilotage.—The tariff for pilotage is 30 pesetas for a sailing vessel and 50 pesetas for a steamer.

Plan of Adra anchorage on 2717.

Page 145.—Adra.—Light.—A light is shown from the extremity of the West jetty, which is under construction; the light is moved out as the work progresses.

Chart 774, Adra to Cartagena.

Page 146.—Sabinal point.—Light.—The old yellow tower having been damaged has been abandoned, and a light is shown from an iron trellis-work structure, 79 feet high, erected over the dwelling-house in a position 164 yards northward of the old lighthouse.

Chart 2437.

Page 147.—A bank, 5½ miles in length and 2 miles in breadth, has been taken from a French chart and noted on chart 2437. Its least depth is 36 fathoms, situated in lat. 35° 58′ N., long. 2° 18′ W., or about 36 miles eastward of Alboran island.

Plan of Alboran island on 2717.

Page 148.—Submarine telegraph cables.—*Omit* paragraph. There are no submarine telegraph cables landed at Alboran island.

Plan of Cape de Gata on 2717.

Page 152.—Cape de Gata light.—The centre of the lantern is elevated 194 feet above high water.

Plan 1194, Cartagena harbour.

Page 166. — Losas rocks. — Beacon. — *Omit* from "painted black" to "on it," *substituting* "consisting of a pillar surmounted by a cone, all painted black, with 'Las Losas' in white on the pillar, and the figure '2' in white on the cone,".

Santa Ana rock.—Beacon.—After "ball" *insert* "and cone, the whole painted black."

Page 167.—Muelle de Alfonzo XII.—Warping buoys.—A line of 10 warping buoys lie about 100 yards from the mole and 100 yards apart.

Plan of Porman bay on 2717.

Page 170.—Porman rock.—Beacon.—The colour of the Porman rock beacon has been altered from white to black.

Chart 774, Adra to Cartagena.

Page 171.—Cape Palos.—Wireless telegraph station.—A wireless telegraph station has been established at Cape Palos, open to the public at all times: Call letters E.A.P.

Conspicuous landmarks.—The high wireless mast on Cape Palos, south-westward of the lighthouse, and the three mine chimneys near Espada point, are conspicuous from seaward.

Page 162.—Fort Tejon. Pictures. [illegible]

Page [illegible]—Adobe. [illegible]

Page [illegible]—Sabinal pass.—[illegible]

Page 167.—A [illegible]

Page 168.—Subterranean telegraph cables.—[illegible]

Page 169.—Cape de Cana Point.—[illegible]

Page 169.—Issas rock.—[illegible]

Santa Ana rock.—[illegible]

Page 169.—Mole de Alfonso XII.—Vergine bugeya.—[illegible]

Page 170.—Pointan rock.—Beacon.—[illegible]

Page 171.—Cape Falco.—Wireless telegraph station.—[illegible]

Concessionous Iembrecks.—The high [illegible] at Cape [illegible]

CHAPTER III.

Chart 1372, Cartagena to Cape San Antonio.

Page 173.—Mar Menor.—Shoal.—A shoal, consisting of loose rock extending about 1½ cables north and south, with a width of about one-third of a cable, and a depth of one fathom, lies about a quarter of a mile off the shore, 3⅓ miles to the northward of Cape Palos.

Plan of Estacio and Grosa island roads on 1458.

Page 174.—La Laja.—Bell-buoy.—The bell-buoy has been painted in red and black horizontal stripes, with a black topmark, and is moored in 11¼ fathoms south-east of the shoal.

Chart 1372, Cartagena to Cape San Antonio.

Page 182.—Villajoyosa lighthouse.—The lighthouse at Villajoyosa has been painted in black and white horizontal bands.

Plan of Port Denia on 1458.

Page 189.—Pilots.—Pilotage is compulsory for merchant vessels over 50 tons, excepting vessels with an officer on board holding a pilot's certificate, or Spanish vessels engaged in local coasting trade, and the tariff for pilotage and mooring is as follows. *See* also page 9:—

Below 50 tons,	for pilotage	9.00	pesetas,	for mooring	5.00	pesetas.	
50 to 100	„	„	14.00	„	„	5.00	„
101 „ 150	„	„	22.00	„	„	6.50	„
151 „ 200	„	„	23.00	„	„	7.00	„
201 „ 250	„	„	23.50	„	„	7.50	„
251 „ 300	„	„	24.50	„	„	8.00	„
301 „ 350	„	„	25.50	„	„	8.50	„
351 „ 400	„	„	26.50	„	„	9.00	„
401 „ 450	„	„	27.50	„	„	9.50	„
451 „ 500	„	„	28.50	„	„	10.00	„
501 „ 600	„	„	30.50	„	„	11.00	„
601 „ 700	„	„	32.50	„	„	12.00	„
701 „ 800	„	„	34.00	„	„	13.00	„
801 „ 900	„	„	36.00	„	„	14.00	„
901 „ 1,000	„	„	38.00	„	„	15.00	„
1,001 „ 1,500	„	„	43.00	„	„	17.50	„
1,501 „ 2,000	„	„	47.50	„	„	20.00	„
2,001 „ 2,500	„	„	53.20	„	„	23.00	„
2,501 „ 3,000	„	„	59.00	„	„	26.00	„
3,001 „ 3,500	„	„	64.50	„	„	29.00	„
3,501 „ 4,000	„	„	70.00	„	„	32.00	„

For each additional 500 tons or fraction of 500 tons, for pilotage 5.00 pesetas, for mooring 2.50 pesetas.

Plan on 1458.

Page 190.—Trade.—In 1913 the value of the exports was £399,530, and of the imports £19,038.

Shipping.—In 1913, 221 steam vessels, of a total of 163,255 tons, and 131 sailing vessels, of 2,682 tons, entered the port.

Plan of Port Gandia on 1320.

Page 191.—Port Gandia.—Pilotage and mooring.—Tariff for pilotage and mooring:—

For pilotage.

From 50 to 100 tons	12	pesetas.
rising 0.50 peseta for each 50 tons till		
501 to 600 tons	22	„
rising by 1 peseta for each 100 tons till		
1,001 to 1,500 tons	35	„
1,501 „ 2,000 „	40	„
2,001 „ 2,500 „	46	„
2,501 „ 3,000 „	52	„
3,001 „ 4,000 „	64	„

and 5 pesetas for each 500 tons or fraction of 500 tons over.

For mooring.

50 to 100 tons	6.00	pesetas.
rising 0.50 peseta for each 50 tons till		
301 to 400 tons	9.00	„
rising by 1 peseta for each 100 tons till		
1,001 to 1,500 tons	17.50	„
1,501 „ 2,000 „	20.00	„
2,001 „ 2,500 „	23.00	„
2,501 „ 3,500 „	27.50	„

and 2.50 pesetas for each 500 tons or part of 500 tons over.

Trade.—In 1913 the exports were valued at £464,355, and the imports at £78,398.

Line 27: *For* "exports" *read* "imports."

Shipping.—In 1913, 255 steam vessels, of aggregate tonnage of 208,445 tons, and 19 sailing vessels, of 1,443 tons, entered the port of Gandia.

Page 192.—Cullera.—A light has been exhibited, at a height of about 30 feet, on the wharf constructing on Cullera beach.

Plan 562, Port of Valencia.

Page 195.—Light-buoys.—*Omit* the two paragraphs, and *substitute*:—

A black conical light-buoy, showing a *flashing green* light *every three seconds*, duration of flash *three-tenths second*, is moored at the extreme of the Dique del Norte.

Plan on 1458.

Page 190.—Trade.—In 1913 the value of the exports was £399,530, and of the imports £19,038.

Shipping.—In 1913, 221 steam vessels, of a total of 163,255 tons, and 131 sailing vessels, of 2,682 tons, entered the port.

Plan of Port Gandia on 1320.

Page 191.—Port Gandia.—Pilotage and mooring.—Tariff for pilotage and mooring:—

For pilotage.

From 50 to 100 tons	12	pesetas.
rising 0.50 peseta for each 50 tons till		
501 to 600 tons	22	„
rising by 1 peseta for each 100 tons till		
1,001 to 1,500 tons	35	„
1,501 „ 2,000 „	40	„
2,001 „ 2,500 „	46	„
2,501 „ 3,000 „	52	„
3,001 „ 4,000 „	64	„

and 5 pesetas for each 500 tons or fraction of 500 tons over.

For mooring.

50 to 100 tons	6.00	pesetas.
rising 0.50 peseta for each 50 tons till		
301 to 400 tons	9.00	„
rising by 1 peseta for each 100 tons till		
1,001 to 1,500 tons	17.50	„
1,501 „ 2,000 „	20.00	„
2,001 „ 2,500 „	23.00	„
2,501 „ 3,500 „	27.50	„

and 2.50 pesetas for each 500 tons or part of 500 tons over.

Trade.—In 1913 the exports were valued at £464,355, and the imports at £78,398.

Line 27: *For* "exports" *read* "imports."

Shipping.—In 1913, 255 steam vessels, of aggregate tonnage of 208,445 tons, and 19 sailing vessels, of 1,443 tons, entered the port of Gandia.

Page 192.—Cullera.—A light has been exhibited, at a height of about 30 feet, on the wharf constructing on Cullera beach.

Plan 562, Port of Valencia.

Page 195.—Light-buoys.—*Omit* the two paragraphs, and *substitute*:—

A black conical light-buoy, showing a *flashing green* light *every three seconds*, duration of flash *three-tenths second*, is moored at the extreme of the Dique del Norte.

Page 120.—Trade.—[illegible]

Shipping.—In [illegible] steam [illegible] for 1,[illegible] [illegible]

Page 121.—Port Sandin.—Pilotage and harbour.—[illegible]

For [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] 1,000 [illegible] 16 "
[illegible] 1,000 " [illegible] "
2,001 " 3,000 " [illegible] "
3,001 " 4,000 " [illegible] 6 "
4,001 " [illegible] " [illegible] 32 "
[illegible] " [illegible] 41 "

[illegible] 1,000 tons a tonnage of [illegible] over.

For [illegible]

[illegible] [illegible] 1,000 pesetas
[illegible] 1,000 tons [illegible] 1,000 tons or [illegible]

[illegible] 1 pesetas for each [illegible] tons [illegible]

[illegible] 1,000 tons [illegible] 11,500 "
1,001 " 2,000 " [illegible] 20,000 "
2,001 " 3,000 " [illegible] 12,000 "
3,001 " 3,500 " [illegible] 24,000 "

and 24 pesetas for each [illegible] tons or part of 500 tons over.

Trade. In [illegible] the exports were valued at [illegible], and the imports at 178,[illegible].

Line 27: After "exports" read "imports."

Shipping.—In [illegible] 203 steam [illegible], of a gross tonnage of 208,445 tons, and 1,[illegible] sailing vessels of 1,[illegible] tons, entered the port of Sandin.

Page 122.—Cullera.—A light has been established at a height of about 30 feet, on the mount constituting on Cullera beach.

Line [illegible] Port of Tolando.

Page 105.—Lighthouses.—Over the two [illegible], and [illegible] [illegible]—

A fixed conical lighthouse, showing a [illegible] over [illegible] [illegible] [illegible] is erected at the [illegible] the Dique de Xeire.

Page 195 continued. Plan 562.

A red can light-buoy, showing a *flashing red* light *every three seconds*, duration of flash *three-tenths second*, is moored at the northern extreme of the Dique del Est.

A black conical light-buoy, showing a *fixed green* light, is moored at a distance of three-quarters of a cable southward from the junction of the Dique de la Providencia and Dique del Norte.

Swinging buoys.—A series of buoys have been established for adjusting compasses, consisting of a central buoy and four warping buoys. The central buoy is a large mooring buoy, painted black, and marked "N. 16° E.," situated in a position about 2¼ cables, 19° true, from the geodetic pillar on Dique de la Providencia.

From this mooring buoy the tower of Puig convent, painted white, and distant 8 miles, bears 3° true.

The four warping buoys, also mooring buoys, are painted black, and are moored at 590 feet, 0°, 90°, 180°, and 270° true, from the central buoy.

Pilots.—Pilotage is compulsory for merchant vessels, the tariff is as follows. *See* also page 9:—

For pilotage.

From 50 to 100 tons	12	pesetas.
rising 1 peseta for each 50 tons till		
501 to 600 tons	22	„
rising 2 pesetas for each 100 tons till		
1,001 to 1,500 tons	35	„
1,501 „ 2,000 „	40	„
2,001 „ 2,500 „	46	„
2,501 „ 3,000 „	52	„
3,001 „ 4,000 „	64	„

and an additional 5 pesetas for each 500 tons or part of 500 tons above.

For mooring.

From 51 to 80 tons	5.00	pesetas.
81 „ 100 „	6.00	„
rising 0.50 peseta for each 50 tons till		
501 to 600 tons	11.00	„
rising 1 peseta for each 100 tons till		
1,001 to 1,500 tons	17.50	„
1,501 „ 2,000 „	20.00	„
2,001 „ 2,500 „	23.00	„
2,501 „ 3,000 „	26.00	„
3,001 „ 3,500 „	29.00	„
3,501 „ 4,000 „	32.00	„

Plan 562.

Page 196.—Trade.—Line 3 from bottom: *For* "1910" *read* "1913," and *for* "£361,875" *read* "£437,072."

Bottom line: *For* "£90,920" *read* "£126,095 from the United Kingdom."

Plan of Burriana on 1571.

Page 198.—Burriana.—Pilots.—Pilotage for merchant vessels of over 100 tons is compulsory, with the exception of Spanish vessels engaged in the coasting trade, and other Spanish vessels under special conditions, and the dues are as follows for pilotage and mooring. *See* also page 9:—

For vessels of 100 to 200 tons, for pilotage 8 pesetas, for mooring 4 pesetas, increasing 2 pesetas for pilotage, and 1 for mooring, up to 600 tons; for 601 to 700 tons, 16 pesetas for pilotage, and 9 for mooring, increasing again by 2 pesetas for pilotage, and 1 peseta for mooring, for each 100 tons up to 1,000; for 1,001 to 1,500 tons, 28 pesetas for pilotage, and 14 pesetas for mooring. Above 1,500 tons the charge increases 4 pesetas for pilotage, and 2 pesetas for mooring, for each 500, or fraction of 500 tons.

Page 199.—Trade.—In 1913 oranges to the value of £250,254 were exported from Burriana in British vessels.

Plan of Castellon de la Plana on 1571.

Castellon.—Pilotage.—Pilotage is compulsory for merchant vessels of over 80 tons, with the exception of Spanish vessels engaged in the coasting trade, and other Spanish vessels under special conditions, and the dues for pilotage and mooring are as follows. Also *see* page 9:—

		For pilotage.	For mooring.
From 80 to 100 tons	.....	10 pesetas	5 pesetas.
„ 101 „ 200 „	.....	11 „	7 „
„ 201 „ 300 „	.....	12 „	7 „
„ 301 „ 400 „	.....	13 „	7 „
„ 401 „ 600 „	.....	15 „	10 „
„ 601 „ 800 „	.....	17 „	10 „
„ 801 „ 1,500 „	.....	25 „	20 „
„ 1,501 „ 2,000 „	.....	30 „	20 „
2,001 and over, extra for each 100 tons		1 „	00.50 „

Page 200.—Trade.—In 1913 oranges of the value of £251,076 were exported from Castellon in British vessels.

Page 201.—Columbrete Grande.—Light.—Light altered; *see* Light list.

Plan 344, Port of Tarragona.

Page 213.—Shipping.—In 1913, 592 steam vessels, with a total tonnage of 523,401 tons, and 24 sailing vessels, with a total tonnage of 4,746 tons, entered the port.

Plan 1195, Approach to Port of Barcelona.

Page 215.—Rio Llobregat.—Bell-buoy.—The bell-buoy marking the edge of the 5-fathom line off the river mouth has been painted red.

Page 216.—Line 12 from bottom: *After* "buoys" *insert* "and a light-boat."

Page 217.—Pilots.—Pilotage is compulsory for merchant vessels, and the tariff for pilotage and mooring is as follows:—

For pilotage.

From	50 to	100	tons	15	pesetas.
„	101 „	200	„	20	„
„	201 „	400	„	25	„
„	401 „	600	„	30	„
„	601 „	800	„	35	„
„	801 „	1,100	„	40	„
„	1,101 „	1,500	„	45	„
„	1,501 „	2,000	„	55	„

2,001 and over, 5 pesetas additional for each 500 tons.

For mooring.

From	50 to	100	tons	5.00	pesetas.
„	101 „	200	„	7.50	„
„	201 „	400	„	10.00	„
„	401 „	1,500	„	12.50	„
„	1,501 „	2,000	„	15.00	„

2,001 and over, 5 pesetas additional for each 1,000 tons.

Page 219.—Light-buoy.—*For* "light-buoy" *read* "light-boat," and *for* "a red buoy, marked 'C.D.E.'" *read* "a small boat."

Line 10: *For* "buoy" *read* "light-boat."

Directions.—*For* "buoy" *read* "light-boat and buoys."

Page 221.—Line 9: *For* "560,000" *read* "660,000."

Page 222.—Line 22: *For* "1910" *read* "1913."

Line 23: *For* "842,023 tons" *read* "1,200,015 tons."

Plan of Masnou on 1222.

Page 223.—Buoy.—The buoy is painted in black and red horizontal stripes.

Plan of Mataro on 1222.

Line 5 from bottom: *For* "white" *read* "black."

Chart 310.

Page 224.—Calella light.—Period altered.

[illegible] Fort at Fortrose.

Page 213.—**Shipping.**—In 1864, 262 steam vessels, with a total [illegible] 21 sailing vessels, with a total tonnage of [illegible] tons.

[illegible] Dunrobin Castle.

Page 214.—**Loch Morlich.**—The [illegible] of the 3-arched bridge over the River Dee [illegible]

Page 216.—[illegible] "Dee" means a [illegible]

Page 217.—**Pilots.**—[illegible] for pilots [illegible] and the fees for pilotage are as follows:—

For pilotage

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	100	200	[illegible]
[illegible]	200	100	[illegible]
[illegible]	400	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1,000	2,000	[illegible]

[illegible] 500 tons.

For towage.

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	100	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1,000	2,000	[illegible]

[illegible] for vessels 1,000 tons.

Page 219.—**Hill-burgh.**—[illegible] Hill-burgh [illegible] "D.R." [illegible] "Hill-burgh."

Page 220.—**Tore Loch.**—[illegible] "Glen-loch" [illegible]

Page 221.—[illegible] "Ogbo" [illegible]

Page 222.—[illegible] "Ardmillan" and "Ibhar."

[illegible] 22 [illegible] 1,295 [illegible]

[illegible] on 222.

Page 223.—**Bucy.**—The bow is [illegible] arched arches.

[illegible] on 223.

[illegible]

[illegible]

Page 224.—**Cullie Hill.**—[illegible]

Plan of San Feliu de Guixols on 1391.

Page 227.—Shipping.—In 1913, 306 steam vessels, with a total tonnage of 230,815 tons, and 131 sailing vessels, with total tonnage of 8,629 tons, entered the port of San Feliu de Guixols.

Plan of Palamos anchorage on 1391.

Molino point shoal.—*For* " (Pera Griu) " *read* " (Pere Grau (Pera Griu).)"

Buoy.—The buoy on the north-western edge of Molino point shoal is now painted black.

Page 228.—Line 20: *Omit* from " a fixed green " to " mole," and *substitute* " Lights are also shown from the north and south corners of the mole."

Breakwater.—The breakwater was nearly completed in November, 1914, the head only remaining unfinished.

Plan of Port Cadaques on 1615.

Page 234.—La Entina.—Buoy.—The buoy which formerly marked the eastern edge of La Entina shoal has disappeared, and will not be replaced.

Chart 1804, Cape San Sebastian to Cette.

Page 237.—Port Selva.—Light.—*Omit* paragraph, *substituting*:—

A light is shown from a square tower with a white lantern on a square stone building situated on Sernella point; the lantern is elevated 73 feet above high water.

CHAPTER IV.

Plan of Port Iviza on 3277.

Page 244.—Lines 3 to 5: *Omit* paragraph, and *substitute*:—

A light is shown from a concrete tower surmounted by a grey lantern situated on the outer end of the eastern mole.

Anchorage.—The line marking the limit beyond which vessels should not pass to the northward is also marked by two black buoys.

Chart of Iviza and Formentera islands on 3276.

Page 245.—Tagomago island.—Light established.—A light is shown, at an elevation of 255 feet, from a grey stone octagonal tower on a rectangular building, 49 feet in height, situated near the south-eastern end of Tagomago island.

Chart 3276.

Page 246.—Light.—Permanently discontinued on Punta Grossa.

Plan of harbour and anchorage of Palma on 3036.

Page 253.—Bajo del Corp Mari.—Buoy.—The colour of the buoy marking the outer edge of this reef has been changed to red, in accordance with the uniform system.

Page 255.—Shipping.—*Cancel* paragraph, and *substitute*:—

In 1913, 162 steam vessels, with a total tonnage of 148,360 tons, entered the port, and 66 sailing vessels, with a total tonnage of 3,452 tons.

Plan 148, Port Mahon.

Page 270.—Port Mahon.—It is proposed to construct a naval base at La Vineta, Port Mahon, and to repair the workshops, &c., on Pinto island, arsenal, quays, &c.

Page 271.—Pilots.—The tariff for pilotage and mooring is as follows:—

For pilotage.

From	50 to	100	tons	.....	15.00 pesetas.
„	101 „	200	„	.....	25.00 „
„	201 „	400	„	.....	30.00 „
„	401 „	600	„	.....	35.00 „
„	601 „	800	„	.....	40.00 „
„	801 „	1,100	„	.....	45.00 „
„	1,101 „	1,500	„	.....	50.00 „
„	1,501 „	2,000	„	.....	55.00 „

over 2,000, for each 500 or fraction of 500 tons, 5 pesetas.

For mooring.

From	50 to	100	tons	.....	5.00 pesetas.
„	101 „	200	„	.....	7.50 „
„	201 „	400	„	.....	10.00 „
„	401 „	1,100	„	.....	12.50 „
„	1,101 „	2,000	„	.....	15.00 „

over 2,000, for each 1,000 or fraction of 1,000 tons, 5 pesetas.

Page 272.—Leading lights.—

A light (formerly the front leading light) is exhibited close to the eastern extreme of Cala Fonts point.

The leading line is to be expunged from the plan.

Line 3: *For* "black" *read* "red."

Line 10: *For* "red" *read* "black."

Line 12: *For* "red can-shaped" *read* "white."

Buoy.—Lines 24, 25: *Delete* the paragraph, and *substitute*:—

Page 272 continued. Plan 148.

Light-buoys.—A black conical light-buoy, exhibiting a *flashing green* light *every three seconds*, is moored about 50 yards westward of San Felipet point.

Omit the three bottom lines and *insert*:—

A red conical light-buoy, exhibiting a *flashing red* light *every three seconds*, marks the north-eastern edge of Moro rocks at about 1¼ cables westward of San Felipet point, as charted.

Page 273.—Line 6: *Expunge* "The floating dock is moored here."

Frares spit.—Beacon.—The Frares spit beacon has been painted in black and red horizontal stripes, surmounted by a black ball, in accordance with the uniform system.

Page 277.—Dock.—*Expunge* paragraph.

Chart 1317, Majorca and Minorca.

Page 282.—Escull den Nate.—Light established.—A light is shown, at an elevation of 139 feet, from a light-coloured truncated pyramid, surmounted by a turret and white lantern 42 feet in height, situated on the north-western extreme of Escull den Nate.

CHAPTER V.

Plan 2742, Ceuta bay.

Page 286.—Submarine telegraph cable.—Buoy.—A red buoy, with a spherical topmark, painted in four black-and-white sections, with "Cable Telegraphico" on each section, is moored at a distance of about 4½ cables, 187° true, from the mole in Almadraba bay to mark the position of the cable.

Almadraba bay.—Light.—A light is shown from the mole in Almadraba bay.

Chart 3578, Approaches to the Strait of Gibraltar.

Page 287.—Punta de Castillejos.—Rock.—A rock, with 6 feet, which in fine weather is easily distinguished by the light green colour of the water, and which is known as "Piedra Blanca," lies at a distance of about 10½ cables, 152° true, from Caballo rock.

Roca Caballo.—Rock awash.—A rock, awash at low water, lies about 20 yards south-eastward of Caballo rock.

Line 8: *Omit* from "these are" to end of paragraph.

Tunny point.—Tunny point is a small sandstone projection with a ledge of rocks from one to 10 feet above high water, extending about a cable to seaward about 5 miles southward of Punta de Castillejos.

Southward of Tunny point, at distances of 7 and 14 cables, foul ground extends 1½ cables off-shore.

[illegible]

Night-buoys.—A buoy [illegible] a [illegible] [illegible] [illegible]

Page 287 continued. Chart 3578.

Shoal.—A rocky patch, half a cable in extent, with a depth of 4 fathoms, lies 4¾ cables from the coast 2¼ miles southward of Tunny point.

Page 288.—Useful hill, 424 feet above high water, is the northern summit of the Pan de Azucar foot hills, and is easily distinguished by its red colour and a grove of trees near the top.

Plan 183, Tetuan bay.

Anchorage.—At end of paragraph *add*:—

There is a small stone pier at the head of the bay, about 50 yards long, and with a depth of 5 feet at its outer end.

Vessels are recommended not to anchor in less than 15 fathoms, as the holding ground is better in deep water, and should avoid anchoring within 1½ miles of Cabo Negro, as the bottom is very rocky and holding ground poor, also the tidal streams round the point are strong.

Good anchorage was found in 17 fathoms, sand and gravel, with Road hill bearing 224° true, distant 2¼ miles. In 19 fathoms, sand and gravel, with Cabo Negro tower bearing 148° true, distant 2¾ miles, and in 12 fathoms, sand and shell, with Useful hill bearing 272° true, distant 2½ miles.

Depths.—The soundings off this part of the coast decrease gradually, except near Cabo Negro, where there is deep water close to the cliffs.

Clouds.—During easterly winds the summits of the hills and mountains are generally covered with heavy dark masses of cloud, and the land appears dark and sombre.

Page 290.—Tetuan.—Trade.—In 1912 the exports amounted in value to £17,894, and the imports to £84,537.

Page 291.—Shipping.—In 1912, 158 steam vessels, of total tonnage 93,607 tons, and 43 sailing vessels, totalling 941 tons, entered the port of Tetuan.

Line 8: *For* "and the top is elevated about 390" *read* "345 feet above the sea."

Shoals.—A small rocky patch, with 4 fathoms, lies 10½ cables, 25° true, and another, with a depth of 5 fathoms, 11½ cables, 121° true, from the fort at the entrance to Rio Martin.

Urania rock.—Urania rock, with a depth of 3¾ fathoms, lies 3½ cables from the shore, and 13½ cables eastward from Tetuan fort.

About 1½ miles southward of Urania rock there is a rocky patch, 3 cables in extent, 1½ cables from the shore, with a least depth of 4 feet.

[illegible]

SIGAL.—A rocky point, half a mile in extent, [illegible] [illegible] 42 miles from the [illegible] of Tunis [illegible].

Page 283.—Lighthouse Hill.—[illegible] the above [illegible] [illegible] the French Admiralty [illegible] [illegible] by its [illegible] [illegible] [illegible].

[illegible]

CORONA.—[illegible]

[illegible]

[illegible]

[illegible]

Page 299.—T[illegible]—[illegible]

[illegible]

[illegible]

[illegible]

ROSA.—[illegible]

[illegible] ROCK.—[illegible]

Chart 2437, Cape Tres-Forcas to Cape Ivi.

Page 309.—Tunny fishery.—A tunny fishery has been established near Vinas creek, about one mile to the south-westward of Los Farallons. For marking, *see* page 73.

Plan of Melilla harbour on 1692.

Page 310.—Melilla harbour.—The breakwater has been completed to about 100 yards beyond the turn to the south-westward (1915).

Buoy.—The buoy, with black and red horizontal stripes, has been moved to a position on the south-western side of the extremity of the breakwater works.

Chart 2437, Cape Tres-Forcas to Cape Ivi.

Page 316.—Port Kelah.—Port Kelah is a place of rising importance, situated close to the south-eastward of the north extreme of Cap Milonia; vessels of large tonnage now call there for cargoes of ore.

Plan of Nemours on 178.

Page 318.—Harbour works.—Buoys.—Two buoys are moored, provisionally, 150 yards apart, in the prolongation of the two new jetties, under construction, off the town of Nemours; they are moored in a line parallel to the coast, and distant from it about 2½ cables. These buoys mark the channel to the enclosed harbour under construction, and will eventually be replaced by light-buoys.

Caution.—Until these light-buoys are in place navigation at night is dangerous within 3 cables of the shore.

Plan 812, Oran harbour, &c.

Page 332.—Lights.—Lights have been established, shown from a post on a spur at the north-east extreme of the Quai des Hauts-fonds, and from the extremity of the spur of the Jetée du Large at a distance of about eight-tenths of a cable northward of the former light.

Light-buoys.—*Expunge* paragraph 4. The black light-buoy exhibiting a *fixed red* light which formerly marked the outer end of the works in progress on the Quai des Hauts-fonds has been withdrawn.

Page 334.—Shipping.—In 1913, 3,839 vessels, of total tonnage of 3,826,964 tons, entered the port of Oran.

Plan of Arzeu on 1766.

Page 338.—Pilots.—The rate of pilotage for sailing vessels is 0.14 francs, and for steam vessels 0.07 francs per ton of registered tonnage.

Harbour regulations.—The time allowed for loading and discharging cargoes alongside the jetty is strictly limited, according to tonnage.

Plan of Mostaghanem on 1766.

Page 341.—Port de Mostaghanem.—Lights.—*Omit* first paragraph. The light on plateau westward of the marine barracks has been discontinued.

The remaining three lights on the breakwaters are now established in circular metal turrets.

Caution.—*Cancel* paragraph.

Plan of Port Tipaza on 1766.

Page 355.—Port Tipaza.—Leading lights.—Leading lights have been established as follows:—The front light is shown from an iron column near the head of the mole, and the rear light from an iron column situated about 149 yards, 181° true, from the front light.

The lights when in line lead up to the mole in a line parallel to its direction.

Plan 2555, Port of Algiers.

Page 359.—Line 16 from bottom: *For* "on the eastern face" *read* "close to the north-east wall."

Page 360. — Port of Algiers. — Lines 7 and 8 from bottom: The works referred to are now shown on the plan of the port. Jetée du Sud is now a part of Mole Amiral Mouchez.

The railway runs on to these moles.

Line 5 from bottom: *add* "Shoaler water is reported (1916) southward of this jetty."

Page 361.—Depths.—Line 12 from top: *For* "1½ to 5 fathoms," *read* "5 to 7 fathoms, to about the distance of half a cable or less in places off the quay, as shown on the amended plan."

Page 362.—Pilots.—The pilotage dues are: For sailing ships, 0.06 francs entering and 0.03 francs leaving, for steam vessels, 0.03 francs entering, and 0.015 francs leaving, per ton registered. Vessels, either sailing or steam, putting into Algiers without trading are exonerated from pilotage dues on leaving.

Page 365.—Coal and supplies.—The charge for fresh water in the anchorage for trading vessels is 3 francs a ton up to 5 tons, with a minimum charge of 9 francs, up to 15 tons 2.50 francs a ton, over 15 tons 2 francs a ton. Alongside the quay by day 1 franc a ton, by night 2 francs a ton.

For men-of-war: For 1 to 10 tons 2 francs a ton, over 10 tons 1.25 francs a ton.

Page 366. — Algiers. — Dangerous cargoes. — All vessels with explosive or inflammable cargoes must declare them at once, and fly a red flag. The vessel must remain in the outer anchorage or part of the port designated by the port authorities until authorised to discharge the cargo, which must be done under special regulations and in the part of the harbour reserved for this purpose.

Part of Madagascar [illegible]

Page 241.—Port de Mozambique.—Lights.—[illegible]

[illegible]

[illegible]

[illegible]

Part of Madagascar [illegible]

Page 275.—Port Tiranna.—Leading lights.—[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Page 370.—Line 16 from bottom.—[illegible]

[illegible]

Page 380.—Port of Algiers.—[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Page 382.—Filots.—[illegible]

[illegible]

Page 382.—Filots.—The pilots, three men, for shifting ships from anchoring and [illegible] berths, for towing, warping, [illegible] and [illegible] leaving, are [illegible] ships, either sailing or steaming, passing into Algiers harbour [illegible] exonerated from pilotage fees on leaving.

Page 383.—Coal and supplies.—The charge for fuel [illegible] is a reduction for trading vessels of 3 francs a ton; [illegible] minimum charge of 3 francs, up to 15 tons; 2.50 [illegible] 2 francs a ton. A supply of the quality by [illegible] a ton, [illegible] 2 francs a ton.

For inter-war. For [illegible] 2 francs a ton, [illegible] 2.50 francs a ton.

Page 386.—Algiers.—Dangerous cargoes.—[illegible] explosive or inflammable cargoes must decide [illegible] [illegible] time. The vessel must remain in the outer [illegible] of the port designated by the port authorities until authorised to discharge the cargo, which must be done under supervision and in the part of the harbour reserved for this purpose.

Page 366 continued. Plan 2555.

Shipping.—In 1913, 6,501 vessels, with a total tonnage of 9,717,892 tons, entered the port.

CHAPTER VI.

Plan of Philippeville anchorage on 178.

Page 396.—Philippeville.—Mail steamers.—Ships with mails entering at night should show a *green* light above the *white* light at the fore.

La Darse.—Steam or motor-boats must not exceed a speed of 4 knots in La Darse.

Boats may wait at the stairs on condition that they do not obstruct the landing; they must not be left unattended.

Page 397.—Shipping.—In 1913, 1,805 vessels entered the port, with a total tonnage of 716,511 tons.

Plan 1567, Approaches to Bona.

Page 408.—Submarine telegraph cables.—*Omit* "and one to Bizerta." This cable does not exist.

Shipping.—In 1913, 1,447 steam vessels, total tonnage 900,181 tons, and 127 sailing vessels, of total tonnage of 10,918 tons, entered the port of Bona.

Plan of Port de Calle on 252.

Page 413.—Submarine telegraph cable.—*Expunge* paragraph. The cable no longer exists.

Chart 1200, Galita island.

Page 415.—Galitona and Aguglia islets.—Rock.—*Omit* paragraph 3, *substituting*:—

At a distance of about $5\frac{4}{10}$ cables, 348° true, from the 518-foot summit of Galitona islet is a rock with $3\frac{3}{4}$ fathoms over it; with this exception, and the rocks at the south-west end of Galitona, these islets are clear and steep-to.

Omit footnote. The examination has been made and the rock located as above.

Charts 252 and 250.

Page 421.—Shoals.—*Omit* second paragraph, *substituting*:—

The *red* sector of Cap Serrat shows over Fratelli rocks and shoals, and the Ras Engela light is obscured over them.

Chart 1569, Approaches to Bizerta.

Page 423.—Port of Bizerta.—Detached breakwater.—This breakwater was damaged in 1915, and the northern entrance between the detached breakwater and the Jetée Nord has been temporarily closed to navigation.

Chart 1569.

Page 424.—Lights.—Jetée Nord.—The light formerly exhibited at a distance of 200 yards within the head of the Jetée Nord has been discontinued.

The light formerly shown from a position 72 feet from the outer end is now shown from the head of the Jetée Nord.

Page 425.—Le Canal.—Lights established.—Lights have been established shown from white cylindrical pedestals, 10 feet high, erected on the quays on the north and south sides, respectively, of the inner end of Le Canal.

Ras Sebra.—*Cancel* paragraph, *substituting*:—

A light is shown from an iron tower erected on the bank about 80 yards south-eastward of the extremity of Ras Sebra.

Baie de Sebra.—Harbour works.—A new commercial harbour is being constructed (1915) in Baie de Sebra, which, when complete, will have a depth of 26¼ feet, and about 2 miles of quays. Machinery capable of loading 200 tons of coal per hour has been installed on a private quay in Baie de Sebra by the Societie General des Houilles et Agglomerés.

When the new harbour is completed it is intended to close the coaling wharves along the side of Le Canal.

Buoys.—*Omit* paragraph, *substituting*:—

A red conical buoy is moored about half a cable from the outer end of the jetty on the northern side, marking the edge of the shoal water. There are two mooring buoys in Baie de Sebra.

Rade Interieur.—Buoys.—*After* "a red buoy" *insert* "surmounted by a staff and cone," and *after* "southern in 5 fathoms" *insert* "each surmounted by a staff and inverted cone."

Omit from "The three buoys" to end of paragraph, *substituting* "The two black buoys are fitted with a tripod, from which a *red* signal light is shown when the mail steamer is moving in the anchorage."

Light-buoy.—A black conical light-buoy, with a cylindrical topmark, and exhibiting a *fixed red* light, called the "Bouée de l'entre," is moored in 5½ fathoms, off the bank on the eastern side of the Rade Interieur, 3 cables eastward of Ras Sebra light.

Page 426.—Line 14: *For "green fixed" read "green occulting."*

Line 3 from bottom: *Omit* line. The light on the western quay has been discontinued.

Page 427.—Baie de Seti Meriem.—Shoal.—A small shoal, with 2 fathoms, lies 1¼ cables from the shore, and 1$\frac{6}{10}$ cables east by north from the south point of Ras el Krem.

Page 427 continued.
Plan of Lake Bizerta on 1381.

Ras el Krem.—Barrage.—A barrage extends for about three-quarters of a cable to the south-westward from the southern extremity of Ras el Krem.

Page 428.—Buoys.—*Omit* the 9 paragraphs, and *substitute*:—

A red light-buoy, with a conical topmark, exhibiting an *occulting green* light, is moored in 6¾ fathoms, 20 yards south-westward of the extremity of the barrage extending from Ras el Krem.

A black light-buoy, with a cylindrical topmark, exhibiting an *occulting red* light, is moored in 6 fathoms three-quarters of a cable west-north-westward of the beacon at the end of the Barrage des Pecheries, to mark the edge of the bank. This buoy will be moored close to the extremity of the barrage when the dredging in progress is complete.

A black light-buoy, with a cylindrical topmark, exhibiting a *fixed red* light, is moored in 6½ fathoms 1½ cables south-westward of the beacon on the barrage, to mark the edge of the bank extending south-westward from the end of the barrage. This buoy will be taken up and remoored to north-north-eastward of Pointe du Palmier, on the south side of the Goulet du lac, when the dredging in progress is completed.

A red buoy, with a conical topmark, lies in 6 fathoms about 1½ cables south-eastward of Pointe Karuba, and marks the edge of the shoal water off that point.

A red light-buoy, with a conical topmark, exhibiting a *fixed green* light, is moored in 6 fathoms 1½ cables southward of the beacon on south end of Ile Srira, and marks the edge of the bank.

A black light-buoy, with a cylindrical topmark, exhibiting a *fixed red* light, is moored in 6 fathoms, about 2 cables north-westward of Ras Shara.

A red light-buoy, with a conical topmark, exhibiting a *green occulting* light, is moored in about 5 fathoms about 3½ cables eastward from the beacon on Pointe de Duar, and marks the extremity of the bank extending eastward from that point.

A red conical buoy, with a conical topmark, lies in 5½ fathoms about 3½ cables south-eastward of Pointe de Duar, and marks the edge of the bank off Dzira el Kbira.

A red light-buoy, with a conical topmark, exhibiting a *fixed green* light, lies in about 5 fathoms 6¼ cables south-south-eastward from the beacon on Pointe de Duar, marking the western side of the entrance to Le Lac.

A black light-buoy, with a cylindrical topmark, exhibiting a *fixed red* light, lies in about 5 fathoms 2½ cables south-westward from the south point of Ras Keblaoui, and marks the eastern side of the entrance to Le Lac.

[illegible]

[illegible] Pass of Kivon.—Bar Range.—[illegible]

[illegible] Kivon.

Page 425.—Buoys.—[illegible]

A red can buoy [illegible] exhibiting an [illegible] light, [illegible] Kivon.

A black light buoy [illegible] exhibiting an [illegible] light, [illegible] Kivon.

A black can buoy [illegible] of the Bar Range of the Pass of Kivon.

A red buoy with a conical top, [illegible] exhibiting a [illegible] light, [illegible] beacon on the bar [illegible] in entering south-westward from the end of the bar range. This buoy will be found close to the [illegible] of the Pass of Kivon.

A red buoy, with a conical top, [illegible] exhibiting a [illegible] light, [illegible] beacon on the bar [illegible] in entering south-westward from the end of the bar range. This buoy will be found close to the [illegible] of the Pass of Kivon.

A red buoy, with a conical top, [illegible] about 15 cables south-eastward of Point Kivon, [illegible] the edge of the shoal [illegible] that point.

A red light buoy, [illegible] in the pass [illegible] of the beacon [illegible] the [illegible] of the bar.

A black light buoy, [illegible] the [illegible] of the Pass of Kivon.

A red can buoy, [illegible] of the Pass of Kivon.

A red conical buoy, [illegible] of the Pass of Kivon.

A red buoy, with a conical top, [illegible] exhibiting a [illegible] light, [illegible] beacon on the bar [illegible] westward from the end of the bar range.

A red can

Plan on 1381.

Page 429.—Port de Sidi Abdallah.—Lights.—A light has been established at Pointe du Caid shown from a minaret at the south-east angle of the port office.

Leading lights have been established, the front light on the coal wharf, and the rear light on the south-east angle of the electric light works. These lights in line in a sector of 10° indicate the axis of the dredged channel into the harbour.

Light-buoys.—Two light-buoys have been established to mark the entrance to the dredged channel into the Port of Sidi-Abdullah, a red light-buoy, with a conical topmark, exhibiting a *fixed green* light on the northern side, and a black light-buoy, with cylindrical topmark, exhibiting a *fixed red* light, on the southern side.

Lines 11 to 9 from bottom: *Omit* paragraph. The light-buoy 1½ miles southward of Ras Keblaoui has been discontinued.

Line 7 from bottom: *Omit* from "Two small buoys" to end of paragraph.

Plan 1569, Approaches to Bizerta.

Page 430.—Harbour regulations.—The Commercial port comprises the Avant port, the Old harbour, Le Canal, Baie de Sebra, and the part of Le Goulet bounded by the line passing north and south through the lighthouse at Point Sebra.

The pilot on arrival on board acquaints the captain of the vessel with the harbour regulations.

Vessels are prohibited from anchoring in the passages of the port except from actual necessity.

At night every vessel moored at the quays along either side of the canal must extinguish all ordinary position lights, and place on the outside of the vessel a *green* light visible all round if on the north shore, and a *red* light if on the south shore.

All vessels in the port must have a ship-keeper on board.

The old port is reserved for the use of coasters, fishing boats, &c.

In case of fire on board the captain must take the first measures for its extinction, and warn the officers of the port and the agents as soon as practicable.

No ashes, rubbish, or unwholesome liquids may be discharged overboard.

Fishing is prohibited within the port and outside within 360 yards of the harbour works.

If for any reason anchors or chains have to be left behind in the port they must be properly buoyed.

Speeds.—The speed of men-of-war passing through the canal must not exceed 8 knots or 10 knots for destroyers or torpedo boats.

Page 430 continued. Plan 1569.

Towage.—Towage is optional in the harbour, but compulsory in the canal for sailing vessels of more than 50 tons.

The towing service is conducted by the Port Concessionary Company, and the use of a tug does not relieve the vessel of the obligation of pilotage.

Pilots.—The pilots place their local knowledge at the disposal of the vessel, but the captain remains entirely responsible, whether by day or night, for the manœuvring of his ship, and any grounding or accident due to the manœuvring of his ship.

On leaving the port requisitions for a pilot should be made at least four hours beforehand.

Pilotage will be considered as being exercised at night if the pilot comes on board or leaves between the times of sunset or sunrise.

During the sojourn or detention of the pilot on board he is entitled to second-class accommodation.

The tariff for pilotage is as follows:—

For all vessels from outside the harbour to the port, by day 10 f., by night 15 f.

For all vessels within the port at night in addition to the above:—

Up to 300 tons	10 f.
From 301 to 800 tons	15 f.
From 801 and over	20 f.

For all vessels put into quarantine having taken the pilot on board, detention fee 10 f. per day.

Avant port.—A liquid fuel store has been established on the south shore of L'Avant port, and the pier is arranged for large vessels to go alongside.

Plan of Lake Bizerta on 1381.

Page 431.—Directions.—*Omit* fifth paragraph, and *substitute*:

After passing the Barrage de Pecheries the two black light-buoys should be left close-to on the port hand, and the red light-buoy, marking the extreme of the shoal which extends southward from Ile Srira, should be left on the starboard hand about half a cable distant. The course then is to pass between the red and black light-buoys north-westward of Pointe Shara, and which mark the edge of the shoals off Pointe Duar and Pointe Shara, respectively, after which, turning to the southward, pass between the red buoy with conical topmark marking the edge of the bank off Dyira el Kbira and the black light-buoy south-westward of Pointe Shara, and finally between the red and black light-buoys south-westward of Ras Kablaoui into the Lac, when course should be shaped for the anchorage required, or, if proceeding to Port Sidi Abdallah, steer 156° true until Pointe Caid light bears 203° true, when steer for the light-buoys off the entrance to the dredged channel.

Page 431 continued. *Plan 1569, Approaches to Bizerta.*

At night.—*After* "about this bearing" *insert*: "The light which has been established on the south side of the inner end of Le Canal shows a *white* sector over the entrance to Baie de Sebra, a *red* sector to the northward and eastward, and a *green* sector to the southward. The light on the north side of the inner end of Le Canal shows a *white* sector through the fairway between the Rade Interieur and Goulet du Lac, with a *red* sector to the northward, and *green* to the southward and eastward.

Plan of Lake Bizerta on 1381.

Port de Sidi Abdallah.—The light which has been established at Pointe Caid on north side of Port de Sidi Abdallah shows a *red* sector to clear the banks and shoal water on the western side of the lake, and a *white* sector over the open water. The leading lights show through a sector of 10° over the dredged channel to the port.

Plan 1569, Approaches to Bizerta.

Page 432.—Submarine telegraph cable.—*Omit* Bona. The cable from Bizerta to Bona no longer exists.

Shipping.—In 1913, 404 steamers, of a total of 552,999 tons, and 396 sailing vessels, of 9,876 tons, entered the port of Bizerta.

Plan 1184, Bay and Lake of Tunis.

Page 441.—Signals.—The following signals are made from the siding to vessels passing:—

By day—

A red pennant - - - -	Proceed.
Two red pennants vertically - -	Moor to station.
A blue flag - - - - -	Decrease speed.

By night—

Two *white* lights vertical - -	Proceed.
A *red* light over a *white* - -	Moor to station.
A *white* light over a *red* - -	Decrease speed.

Signals made by ships passing:—

A red burgee - - - -	I am aground.
A red burgee - - - -	I am secured.
A flag, red and white vertical -	Decrease speed.

Pilotage. — Although the pilot is on board the captain remains responsible for manœuvring his vessel.

The pilot, when detained on board, is entitled to second-class accommodation.

Harbour regulations. — Dangerous cargoes. — Entrance to the canal or basins of the port of Tunis is prohibited to vessels carrying explosives or dangerous substances. Vessels so situated must anchor in the Rade de la Goulette, and conform to the regula-

Page 441 continued. Plan 1184.

tions prescribed for such cases. If only certain authorised quantities are to be discharged vessels may be allowed to enter the basin on condition that the goods are discharged immediately on entry, a guard being placed on the goods at the expense of the ship. Oil-tank vessels may be allowed to discharge in the port under special regulations, but they must be moored bows outward, and with a tug in attendance, ready to leave or be towed out at the least alarm, and in any case must make for the outer anchorage as soon as discharged. The discharge of bilge water is prohibited from these vessels.

Page 442.—Shipping.—In 1913, 1,581 steam vessels, of total of 1,789,949 tons, and 853 sailing vessels, of total tonnage of 41,246 tons, entered the port of Tunis.

Plan of Cape Bon on 250.

Page 446.—Cap Bon.—Wireless telegraph.—A wireless telegraph station has been established at Cap Bon, open to the general public from 7 a.m. to 10 p.m. Central European time. The call letters are F.F.T.

Chart 1159, Susa to Mahedia, &c.

Page 453.—Susa.—The line of blocks protecting the extremity of L'Epis Nord, in the port of Susa, has been extended, about 3 yards by new blocks secured to the foot of the breakwater and rising to the surface of the water only.

Page 455.—Communication.—The railway from Susa to Sfax is completed.

Shipping.—In 1913, 415 steam vessels, of total tonnage of 475,671 tons, and 466 sailing vessels, of total tonnage of 12,486 tons, entered the port of Susa.

Plan 1162, Sfax roadstead.

Page 469.—Communication.—The railway from Susa to Sfax is completed.

Page 470.—Shipping.—In 1913, 811 steam vessels, of total tonnage of 861,223 tons, and 1,296 sailing vessels of total tonnage of 32,511 tons, entered the port of Sfax.

Submarine telegraph cable.—*Expunge* paragraph. These cables have been removed.

Chart 249, Mahedia to Ras Makhabez.

Page 474.—Shipping.—In 1913, 191 steam vessels, and 583 sailing vessels, of total tonnage of 188,799 and 5,029 tons, respectively, entered the port of Gabes.

Page 475.—Submarine telegraph cable.—*Expunge* paragraph. This cable has been removed.

Page 477.—Humt-suk.—Beacons.—Three iron pile beacons, about 10 feet above high water, have been established to mark the

Page 477 continued. Chart 249.

passage, called Passe de Sidi Salem, across the banks from the anchorage to the pier. The two outer beacons are near together, that on the western side being red, with a conical topmark, and that on the eastern side black, with a cylindrical topmark, situated about 3 miles north by west from the pier. The third beacon is black with cylindrical topmark situated about 2½ miles north-west by north of the pier.

Submarine telegraph cables.—*Omit* Sfax and Gabes.

Page 481.—Ras Ashdir.—The following beacons have been established to mark the passage to Ras Ashdir.

The frontier mark, a white masonry pyramid surmounted by a white sphere, elevated 52 feet above high water, when bearing 191° true, marks the axis of the passage to the anchorage.

A black metal pile, with a black cylindrical topmark, 11 feet above high water, and a similar red pile, with a red conical topmark, is moored in 1¼ fathoms on the east, and 1½ fathoms on the west, sides of the passage, respectively.

The frontier tower forms a good sea mark, visible 6 miles in ordinary weather.

CHAPTER VII.

Chart 194, Malta and Gozo islands.

Page 493.—Artillery practice.—Regulations.—*Add* paragraph.

Caution.—When artillery practice is being carried out at night, vessels approaching the harbours of Malta should keep a look-out for a special signal to be displayed from the Naval signal station on the Castille, Valetta, namely, two *green* lights hoisted vertically at the masthead, indicating "If you wish to enter harbour, enter as soon as possible."

Plan 2063, Malta island, northern portion.

Page 496.—St. Paul's bay.—Leading lights have been established in St. Paul's bay, which, kept in line bearing 226° true (S. 53° W. mag.), lead in through the centre of the bay.

The front light is on Skol tal Ghazzonin, and exhibited on an iron standard, at a height of 15 feet.

The rear light is 130 yards from the front light, and exhibited from the side of a house, at a height of 40 feet.

Page 497.—Examination anchorage.—Mooring buoys.—Two mooring buoys have been established in St. Paul's bay at 5½ cables, 28° true, and 2$\frac{4}{10}$ cables, 14° true, from the lights on the jetty near the head of the bay.

Page 497 continued. Plan 2063.

Line 3: *After* "bay" *add* "inside the line joining the entrance points, Selmunet and Ras il Kaura."

Rifle range.—Buoys.—A cross has been substituted for the cage on the north-west buoy and an inverted V in place of the cage on the south-east buoy.

Plan 974, Valetta harbours.

Page 503.—Trade.—In 1913 the imports were valued at £2,510,934, and the exports at £1,053,854.

Shipping.—In 1913, 2,717 steam vessels, of total tonnage of 5,512,876 tons, and 561 sailing vessels, of 33,217 tons, entered the port.

Page 504. — Signals. — A red flag hoisted at Castille signal station, Custom-house flagstaff, or Palace tower flagstaff denotes that a man-of-war is entering or leaving the Grand harbour. Whilst this flag is flying vessels are not permitted to leave their berths or enter the harbour.

When artillery practice is being carried out at night two *green* lights, hoisted vertically at the masthead of the Castille signal station, indicate "If you wish to enter harbour, enter as soon as possible."

Time signals.—*For* "flagstaff" *read* "northern mast."

Wireless telegraph.—A wireless telegraph station has been established at Malta, open to the public at all times. The call letters are V.P.T. The service may be suspended for short periods, and the station is subject to be closed at short notice.

Plan 2628, Malta island, south-east portion.

Rifle-range buoys.—The globe has been removed from the north-west buoy, and replaced by a triangle on the south-east buoy.

Page 505.—Prohibited fishing ground.—In second paragraph *omit* from "continued" to end of paragraph, *substituting* "from the eastern rifle-range buoy in a 175° true direction to Ras-el-Jebel."

The buoy with staff and cage has been discontinued.

Page 506.—Buoy.—A second cage, placed vertically, has been added to the staff of the buoy on the north side of Outer Munsciar rock.

Page 508.—Beacon.—*Omit* from "A beacon" to "bands," and *substitute* "An iron beacon, painted in red and white horizontal bands, with a red triangular topmark."

Page 509.—Examination anchorage.—*After* end of paragraph *add* "inside the line joining Binghaisa and Dellimara points."

Plan 189, Trapani to Marsala, &c.

Page 520.—The dwelling of Point Libeccio lighthouse has been painted in black and white horizontal bands, with "Punta Libeccio" in large black letters below the terrace.

Little image.—Bucy. [illegible]

Page 303.—Trade [illegible]

Bidding.— [illegible]

Page 314.—Sermons [illegible]

Pilgrim signal. [illegible]

Wycliffe's tipstaff.— [illegible]

Wife-purge hurdle.— [illegible]

Page 327.—Trophies and Relics are sacred. [illegible]

Page 342.—Eyes.— [illegible]

Page 363.—Beacon.— [illegible]

Page 370.—Examination armorers.— [illegible]

Page 379.—The Dove of Peter Lincoln. [illegible]

Plan 189.

Page 522.—Favignana.—Fog signal.—A fog signal has been established at Punta Marsala lighthouse.

Plan of Trapani harbour on 189.

Page 529.—Dredging.—Dredging is in progress on the northern side of the entrance to the inner port of Trapani.

Lights.—The mole near the Custom house is called the Health mole, and the light position has been moved to near the middle of the mole.

Mooring buoys.—*For* "three" *read* "two." The innermost of the mooring buoys has been removed.

Page 531.—Shipping.—In 1913, 129 steam vessels, of total tonnage of 149,672 tons, and 16 sailing vessels, of 11,255 total tonnage, entered the port of Trapani.

Plan of Marsala on 2113.

Page 533.—Depths.—Line 5: *For* "being dredged" *read* "completed."

Lights altered.—*See* Light list.
Delete lines 6 to 9 from bottom.

Moles.—Lines 4 to 8: Mole extension is completed.
Delete "light-buoy and pillar."

Light.—From a framework on a masonry hut on the extremity of the above completed arm of the West mole, a light is exhibited.

Page 534.—Trade.—In 1913 the exports were valued at £92,550, and the imports at £60,840.

Shipping.—In 1913, 466 steam vessels, of total tonnage of 245,210 tons, and 994 sailing vessels, of 23,465 tons, entered the port of Marsala, and cleared (with cargo).

Chart 186, Mazzara to Palma.

Page 535.—Punta della Matica (Capo Feto).—Light established.—A light is shown from a yellow masonry building, 20 feet in height, situated on Punta della Matica (Capo Feto).

Page 536.—Beacon.—The beacon on Secca Balata has been painted red.
Line 15: *For* "red" *read* "black."

Page 539. — Cape San Marco. — Light altered. — *See* Light list.

Plan of Sciacca on 2113.

Page 540.—Mooring buoy.—*For* "2½ cables south-westward, in 8 fathoms water," *read* "2 cables southward."

Plan 189.

Page 522.—Favignana.—Fog signal.—A fog signal has been established at Punta Marsala lighthouse.

Plan of Trapani harbour on 189.

Page 529.—Dredging.—Dredging is in progress on the northern side of the entrance to the inner port of Trapani.

Lights.—The mole near the Custom house is called the Health mole, and the light position has been moved to near the middle of the mole.

Mooring buoys.—*For* "three" *read* "two." The innermost of the mooring buoys has been removed.

Page 531.—Shipping.—In 1913, 129 steam vessels, of total tonnage of 149,672 tons, and 16 sailing vessels, of 11,255 total tonnage, entered the port of Trapani.

Plan of Marsala on 2113.

Page 533.—Depths.—Line 5: *For* "being dredged" *read* "completed."

Lights altered.—*See* Light list.
Delete lines 6 to 9 from bottom.

Moles.—Lines 4 to 8: Mole extension is completed.
Delete "light-buoy and pillar."

Light.—From a framework on a masonry hut on the extremity of the above completed arm of the West mole, a light is exhibited.

Page 534.—Trade.—In 1913 the exports were valued at £92,550, and the imports at £60,840.

Shipping.—In 1913, 466 steam vessels, of total tonnage of 245,210 tons, and 994 sailing vessels, of 23,465 tons, entered the port of Marsala, and cleared (with cargo).

Chart 186, Mazzara to Palma.

Page 535.—Punta della Matica (Capo Feto).—Light established.—A light is shown from a yellow masonry building, 20 feet in height, situated on Punta della Matica (Capo Feto).

Page 536.—Beacon.—The beacon on Secca Balata has been painted red.
Line 15: *For* "red" *read* "black."

Page 539.—Cape San Marco.—Light altered.—*See* Light list.

Plan of Sciacca on 2113.

Page 540.—Mooring buoy.—*For* "2½ cables south-westward, in 8 fathoms water," *read* "2 cables southward."

Chart 186, Mazzara to Palma.

Page 541.—Tunny fishery.—A tunny fishery has been established about a quarter of a mile eastward of Torre Salsa, extending about $1\frac{4}{10}$ miles from the shore in a south-south-west direction. The fishery is marked in the daytime by two balls, painted white, and a bundle of palms, on the east side, and another ball and palms in the centre of the fishery, and at night a boat will be stationed about 40 yards from the extremity of the fishery carrying two lights vertically, the upper green and the lower white. *See* also Caution, page 73, and plan.

Page 542.—Cape Rosselo.—Light altered.

Plan of Port Empedocle on 2113.

Page 543.—Lights.—The light on the west mole is shown from a small masonry house erected a few yards from the head of the mole.

Page 544.—Shipping.—In 1913, 366 steam vessels, of 276,716 tons total tonnage, and 793 sailing vessels, of 54,390 tons total tonnage, entered the port of Empidocle.

Pages 544 and 545.—*For "Plan of Girgenti on 190" read "Approach to Port Empidocle on 190."*

Chart 186, Mazzara to Palma.

Page 546.—Punta Bianca.—A conspicuous square two-storied house, painted white, stands near the extremity of Punta Bianca, and forms a good mark for distinguishing the point.

Directions.—At night.—*Omit "fixed," read "occulting."*

Plan of Port Licata on 187.

Page 547.—Licata.—Castel San Angelo is painted in black and white chequers.

Page 548.—Lights.—West mole light, character altered.

Page 549. — Beacons. — *Expunge* second paragraph. The detached breakwater has been completed, and these marks no longer apply.

Caution.—*Omit* from "as the work" to "given to it." The detached breakwater has been completed.

Page 550.—Shipping.—In 1913, 241 steam vessels, of 226,331 tons total tonnage, and 732 sailing vessels, of 33,700 tons total tonnage, entered the port.

Chart 187, Palma to Catania.

Page 551.—Terranova.—Landing stage.—A landing stage is being constructed at Terranova of reinforced concrete, and was nearly completed in August, 1915; it extends about 200 yards from the land.

Page 552.—Wireless telegraph station.—*Expunge* paragraph. This station is no longer available.

Chart 187.

Page 556.—Isola delle Correnti.—Light.—The lighthouse tower is painted in black and white horizontal bands. Character of light altered.

Page 557. — Cape Passero. — Tunny fishery. — A tunny fishery is established in the waters off Cape Passero. It begins in lat. 36° 41′ N., long. 15° 8¾′ E., and extends from the shore for about 7 cables; the width of the net at the foot being about 1,000 feet. The daymark is a float surmounted by a pole with red flag, replaced at night by a white lantern light. *See* marks on page 73.

Light.—Cape Passero light has been altered. *See* Light list.

CHAPTER VIII.

Chart 187, Palma to Catania.

Page 559.—Marzamemi.—Breakwater.—The breakwater has been completed; it commences on the mainland, to the southward of Isola Grande, and extends in a direction 39° true, towards that island.

Light.—*Omit* paragraph, *substituting*:—

A light is shown from an iron framework column on the head of the breakwater.

Page 560.—Isolotto Vendicari.—Tunny fishery.—A tunny fishery has been established on the shore about 1½ miles north of Isolotto Vendicari. The nets extend in a direction varying from north-east to east-south-east for a distance of about 1½ miles; the outer end will be marked by a floating mast with a red flag by day and a *white* light at night.

Plan 182, Syracuse harbour.

Page 563.—Lights.—The lighthouse on Castello Maniaci has been painted in black and white horizontal bands.

Page 564.—Lights.—The light on Punta Castelluccio is shown from a small turret on a building painted in red and white horizontal bands

Line 21 to line 18 from bottom: *Omit* paragraph, and *substitute*:—

Two ordinary electric lamps are established on the north-west side of the pier near the harbour office, one on each side of the landing steps. Lights are shown from the landing place at the Piazza Mazzini.

Page 565. — Mooring buoys. — A mooring buoy for torpedo boats has been established near the harbour office pier; and a red cylindrical mooring buoy has been established in the northern part of the harbour off La Darsena for the use of vessels going alongside.

Plan 182.

Page 566.—Coal.—In 1913 the total quantity of coal imported at Syracuse was 83,107 tons.

Page 567.—Shipping.—In 1913, 1,118 steam vessels, of 1,255,473 total tonnage, and 817 sailing vessels, of 25,753 total tonnage, entered the port of Syracuse.

Plan 181, Port Augusta.

Page 568.—Light.—The lighthouse of Penisola Magnisi has been painted in red and white horizontal bands.

Page 569.—Porto di Augusta.—Compass adjustment moorings.—Moorings for swinging torpedo boats have been established near Pila point, consisting of five concrete piles, one in the centre and one at each of the cardinal points from it.

Page 571.—Secche di Torre Avolos.—Light-buoy.—*For* "outer" *read* "southern."

Plan of Catania on 190.

Page 575.—L'Avamporto.—New breakwater.—The new breakwater westward of the head of the Molo Esterno, when finished, will extend about 475 yards from the shore, leaving an entrance about 350 yards wide. In 1915, 306 yards from the shore end had been completed.

Light-buoy.—The buoy which formerly marked the outer end of the new breakwater has been replaced by a light-buoy exhibiting a *flashing red* light, and which is moved as the works progress.

Shoal.—Two other shoals, of a similar character, lie, respectively, one quarter of a cable north of the lighthouse, on the extremity of the Molo Esterno, and about 30 yards southward from the root of the transverse mole at about 8 and 10 yards from the inner side of the Molo Esterno.

Caution.—Vessels which moor to the Molo Esterno should be careful not to approach within 15 yards of the inner side of the mole, in view of these shoals, and the probability of there being others of the same nature projecting from the base of the breakwater.

Porto Vecchio.—The light is now shown from an iron trellis mounting, on an iron hut, the whole painted grey, situated on the western angle of the head of the mole.

Page 576.—Custom house quay.—A new quay has been constructed at the head of the old port, extending from the inner end of the Inner mole to the extremity of the mole forming the eastern side of the entrance to La Darsena.

Plan on 190.

Page 578.—Trade.—During 1913, 144,200 tons of coal was imported into Catania.

Shipping.—In 1913, 1,961 steam vessels, of total tonnage of 2,297,340 tons, and 2,226 sailing vessels, of total tonnage of 66,268 tons, entered the port of Catania.

Plan of Riposto on 188.

Page 581.—Mole.—The mole has been completed to a distance of 808 feet (May, 1916); the inner part, 480 feet in length, is perpendicular to the coast, the remainder trends in a west-north-westerly direction.

Plan 1687, Messina harbour.

Page 585.—Lights.—*For* "Punta San Ranieri" *read* "**Punta San Raineri** (Ranieri)."

Punta Secca light.—Character altered. *See* Light list.

Mooring buoys.—Five mooring buoys for large vessels have been established in the middle of the port.

Plan 1687, and chart 177.

Page 586.—Anchorages.—Caution.—Owing to the deposit of the ruins of the city the coastline between the Health office and the point south-eastward of the gasometer is extending seawards.

Prohibited anchorages.—*See* page 592.

Line 13 from bottom: *For* "Ranieri" *read* "Raineri."

Page 589.—Trade.—In 1913, 178,575 tons of coal were imported.

Shipping.—In 1913, 2,385 steam vessels, of total tonnage of 3,116,115 tons, and 770 sailing vessels, of total tonnage of 52,992 tons, entered the port of Messina.

Chart 177, The Faro, or Strait of Messina.

Page 592. — Anchorages. — Line 1: *After* "Paradiso" *insert* "northward of Messina."

Mooring buoy. — A Government mooring buoy, suitable for large vessels, has been established, in 21 fathoms, about 6 cables southward of Paradiso, and at 3 cables distance from the shore.

Prohibited anchorages in the strait. — *After* line 21 *insert*:—

Vessels are prohibited from anchoring in the strait outside Messina between the parallels of Fort Campana light and the Citadel.

Vessels are prohibited from anchoring off the coast in the northern approach to Messina between Annunziata river and 100 yards southward of San Francisco di Paolo river.

On the eastern shore of the strait anchorage is prohibited between Villa San Giovanni and the Catona river.

Chart 177.

Page 593.—Calabria.—Prohibited anchorages.—Vessels are prohibited from anchoring off the coast of Calabria between a point situated about 1½ cables southward from the port of Villa San Giovanni and the entrance to Catona river.

Lights.—Sector introduced in Capo Peloro light over Rasocolmo shoal (Modeste).

Plan 168, Ustica island.

Page 597.—Secca di Colombara is covered by an auxiliary *red fixed* light from Punta Uomo Morto lighthouse.

Page 598.—Submarine telegraph cable.—*Expunge* "Naples to," also "and thence."

The cable from Naples to Palermo is laid direct and not viâ Ustica. There is a separate cable from Ustica to Palermo.

Line 9: *Omit* from "of this" to "distance" on line 10.

Line 10: *Omit* "that of."

Chart 172, Lipari islands.

Page 600.—Anchorage.—Mooring buoy.—A mooring buoy has been established in the anchorage on south side of the isthmus.

Plan of Lipari anchorage on 172.

Page 604.—Rada di Lipari.—Mooring buoy.—*After* paragraph *add* "and another in about 33 fathoms 2 cables south-south-east of San Giacomo lighthouse."

Mole.—A mole is in course of construction from a position nearly 2 cables eastward of Pignataro (Giacomo?) red light, and will, when completed, be about 500 feet in length in a south-west direction; it is well advanced (1916).

San Giacomo light.—Character altered. *See* Light list.

Light re-established.—A light has been re-established at Marina Corta, Lipari, at a height of 20 feet.

Chart 177, Strait of Messina.

Page 610.—Modeste shoal (Secca di Rasocolmo).—A sector of *red* light is shown over this shoal, and inshore of it, from Capo Peloro light, as charted.

Plan 175, Milazzo bay.

Page 614.—Milazzo.—Light on North mole.—Character altered.

Lines 2 and 3: *Delete* "iron crane, 36 feet in height"; and *substitute* "description of building not stated." *For* "40 feet" *read* "23 feet."

Mooring buoys.—*For* "cylindrical iron" *read* "cask-shaped."

Page 615.—Shipping.—In 1913, 819 steam vessels, of total tonnage of 377,976 tons, and 293 sailing vessels, of a total of 16,505 tons, entered the port of Milazzo.

Chart 188, Catania to Cefalu.

Page 618.—Rock.—*For* "half a cable" *read* "three-quarters of a cable," and *add* "Another rock with 3 feet is reported to lie near this rock awash and one-third of a cable from the shore."

Page 622.—Tunny fishery.—*Expunge* paragraph.

Plan of Termini Imerese on 170.

Page 623.—Breakwater.—The breakwater has been completed to within about 75 yards of its designed length, and extends for 460 yards outside the position of the breakwater light.

Depths.—From recent surveys it is found that the shore adjoining the city has extended considerably, and the depths in the port have decreased.

Caution.—Light-buoy.—The light-buoy is liable to be washed away, and, in its absence, mariners are cautioned to approach at night with great care, keeping at a distance of at least 3½ cables from the breakwater light.

Page 624.—Mooring buoys.—*For* "three" *read* "four," and *add* "and a small cask buoy for small craft inside them."

Plan 169, Palermo bay.

Page 625.—Light.—A subsidiary light is shown from Cape Zaffarano lighthouse.

Scoglio di Formica.—A subsidiary light, on Cape Zaffarano lighthouse shows in a sector over the Scoglio di Formica.

Beacon.—The iron staff is painted in red and black bands, and a red ball has been substituted for the flag.

Plan of Port of Palermo on 169.

Page 627.—Porto di Palermo.—Breakwater.—A new breakwater is under construction (1914), isolated from, and opposite to, the entrance to Palermo harbour. The progress of the work is marked by spar buoys painted in red and white horizontal bands, moved as necessary. Several cylindrical mooring buoys painted red are also moored along the site of the new work for the use of the vessels employed in the construction.

Light-boat.—A light-boat, exhibiting a *fixed green* light, is anchored near the southern extremity of the isolated breakwater under construction.

Directions.—Vessels entering Port di Palermo must pass between the light-boat and the head of the South mole.

Pages 627 and 628.—Buoys.—*Omit* the six paragraphs, *substituting*:—

The bank off Forte di Castellamare on the south-west side of the harbour is marked on its eastern and south-eastern side by four black spar buoys.

Pages 627 and 628 continued. Plan on 169.

Two red spar buoys mark the edge of the bank south of Santa Lucia pier.

A mooring buoy is moored about midway between the Railway and S. Lucia piers and $1\frac{1}{10}$ cables inside the heads of the piers.

Page 628.—Harbour regulations.—For half an hour before the time of arrival or departure of the mail steamer to Naples, and until she has completed manœuvring, ships are prohibited from entering the port or moving in any way from their moorings.

During the time of prohibition the Commercial code signal **M.L.** will be hoisted at the port office on North mole.

Page 630.—Trade.—In 1913 the value of the imports into Palermo was £2,118,955, and the exports £2,208,306. The total amount of coal imported was 211,618 tons.

Shipping.—In 1913, 2,439 steam vessels, of total tonnage of 3,423,941 tons, and 1,297 sailing vessels, of a total of 97,154 tons, entered the port of Palermo.

Page 631—Tunny fishery.—*Expunge* paragraph.

CHAPTER IX.

Chart 1189, Bonifacio strait.

Page 638.—Porto Longosardo.—Buoys.—The buoy on the starboard hand is a black conical buoy with black staff and cone; that on the port hand is a red conical buoy with red staff and drum.

Plan 2157, Maddalena and adjacent islands.

Page 640.—Light.—Punta Sardegna.—A light is exhibited from a white building, situated near the north extreme of Punta Sardegna; the centre of the lantern is elevated 115 feet.

Page 641.—Secca del Parau.—Buoy.—The white cask buoy has been replaced by a white conical buoy, surmounted by a cylinder with "Parau" on it in black.

Page 645.—Isola Razzoli.—Light.—The lighthouse is painted in black and white horizontal bands.

Isola Santa Maria.—Light.—*Omit* paragraph, *substituting*: "A light is shown from a lighthouse erected on Punta Filetto, the eastern extreme of Isola Santa Maria." The lighthouse is painted red, with the inscription "Punta Filetto."

Page 647.—Secca Corsara.—Buoy.—*For* "iron mounting" *read* "pyramidal iron framework," and *for* "cone" *read* "cylindrical topmark."

Plan 564, Maddalena and approaches.

Page 648.—Lights.—A light has been established on Isolotto Chiesa shown from a wooden post erected near the summit of the islet.

Page 648 continued. Plan 564.

Lines 4 to 7 from bottom: These two lights are exhibited from the outer end of the pier, which has recently been lengthened about 50 feet, on the western side of the entrance to Cala Chiesa.

Page 649.—*Omit* first paragraph, *substituting*:—

Two lights are shown, one from a flagstaff near the north angle of Fort Camicia, and the other from a wooden post 93 yards, 175° true, from it. These two lights when in line lead through Rada de Santo Stephano, clear of the mooring buoys.

A light is shown from the end of the Hospital pier. The light formerly shown from the window of the Marine hospital has been discontinued.

Lines 15 and 16: *Omit* from "red pole" to "cylinder," *substituting* "stone beacon, painted white, about 7 feet high."

Buoys.—The black cask buoy eight-tenths of a cable westward from the mole end, has been replaced by a black iron conical buoy, surmounted by a staff and cone, base downward, marked "Isola Chiesa" in white.

A white barrel-shaped buoy is moored on the northern side of a one-fathom shoal, which lies about 1½ cables south-westward of the light on west side of entrance to Cala Camicia.

Line 18 from bottom: *For* "red buoy" *read* "red conical buoy, surmounted by a cylinder, with 'Nasse' on it in white."

Line 15 from bottom: *Omit* "and is marked by a conical buoy."

Plan 2157, Maddalena and adjacent islands.

Page 650.—Beacons and buoys.—The white cask buoy which marked the south extreme of Secca di Forte Tegge has been replaced by a white iron conical buoy, with a staff and cylinder, and marked "Tegge" in black.

A similar buoy, but marked "Punta Nera" in black, is moored on the southern limit of the shoal to the southward of Punta Nera, the next point to the eastward of Fort Tegge.

Plan of Aranci bay on 163.

Page 658.—Isolotto di Figarello.—Light established.—A light is shown from a tower with a lantern support, 22 feet high, erected near the centre of the Isolotto di Figarello; the lantern is elevated 236 feet above high water.

Rock and beacon.—A rock, on which is a white beacon 5 feet in height, lies about half a mile, 302° true, from the light on the head of the mole in Baia degli Aranci.

Plan 3609, Port Terranova.

Page 660.—Port Terranova.—Rock.—A rock, which shows above water, lies nine-tenths of a cable south-westward of the head of the quay, and is marked by a cylindrical buoy.

Page 648 continued. Plan 564.

Lines 4 to 7 from bottom: These two lights are exhibited from the outer end of the pier, which has recently been lengthened about 50 feet, on the western side of the entrance to Cala Chiesa.

Page 649.—*Omit* first paragraph, *substituting*:—

Two lights are shown, one from a flagstaff near the north angle of Fort Camicia, and the other from a wooden post 93 yards, 175° true, from it. These two lights when in line lead through Rada de Santo Stephano, clear of the mooring buoys.

A light is shown from the end of the Hospital pier. The light formerly shown from the window of the Marine hospital has been discontinued.

Lines 15 and 16: *Omit* from "red pole" to "cylinder," *substituting* "stone beacon, painted white, about 7 feet high."

Buoys.—The black cask buoy eight-tenths of a cable westward from the mole end, has been replaced by a black iron conical buoy, surmounted by a staff and cone, base downward, marked "Isola Chiesa" in white.

A white barrel-shaped buoy is moored on the northern side of a one-fathom shoal, which lies about 1½ cables south-westward of the light on west side of entrance to Cala Camicia.

Line 18 from bottom: *For* "red buoy" *read* "red conical buoy, surmounted by a cylinder, with 'Nasse' on it in white."

Line 15 from bottom: *Omit* "and is marked by a conical buoy."

Plan 2157, Maddalena and adjacent islands.

Page 650.—Beacons and buoys.—The white cask buoy which marked the south extreme of Secca di Forte Tegge has been replaced by a white iron conical buoy, with a staff and cylinder, and marked "Tegge" in black.

A similar buoy, but marked "Punta Nera" in black, is moored on the southern limit of the shoal to the southward of Punta Nera, the next point to the eastward of Fort Tegge.

Plan of Aranci bay on 163.

Page 658.—Isolotto di Figarello.—Light established.—A light is shown from a tower with a lantern support, 22 feet high, erected near the centre of the Isolotto di Figarello; the lantern is elevated 236 feet above high water.

Rock and beacon.—A rock, on which is a white beacon 5 feet in height, lies about half a mile, 302° true, from the light on the head of the mole in Baia degli Aranci.

Plan 3609, Port Terranova.

Page 660.—Port Terranova.—Rock.—A rock, which shows above water, lies nine-tenths of a cable south-westward of the head of the quay, and is marked by a cylindrical buoy.

Page 660 continued. Plan 3609.

Mole.—A mole has been built commencing from a point on the shore about 2 cables northward of the extremity of the wharf, passing over Fiorita islet to Isola Bianca. This mole is being extended from the south-east side of Isola Bianca, and has been completed for a distance of 490 yards in a direction 93° true from the island. An unreliable light is shown at about 100 yards from the extremity of the work.

The mole is probably completed, as the light has been moved from Isola Bianca to abreast the landing steps, near the extreme of the mole.

Light-buoys.—*For* "have white and red bands" *read* "are painted black," and *for* "have white and black bands" *read* "are painted red."

Beacons and buoys.—Entrance to Porto Romano.—*For* "red" *read* "black," and *for* "black and white striped" *read* "red."

Omit "and two near the head of Porto Romano." These mooring buoys have been removed.

Chart 163, Cape Ferro to Port Brandinchi.

Page 662.—Capo Ceraso.—Beacon.—This beacon has been carried away, and a beacon in the form of a truncated pyramid, 13 feet in height and painted white, has been built on a rock situated about $1\frac{6}{10}$ cables south-westward of the outer shoal off Capo Ceraso.

Buoy.—A conical buoy, painted in white and red horizontal bands, surmounted by a staff and cone, and marked "Capo Ceraso," is moored in about $8\frac{1}{2}$ fathoms about half a cable eastward of the outer part of the 3-foot shoal off Capo Ceraso.

Chart 161b, Sardinia, northern portion.

Page 666.—Orosei.—A bank of sand has formed off the Custom house at Orosei extending about $1\frac{4}{10}$ cables from the shore.

Plan of Arbatax road on 1128.

Page 668.—Capo Bellavista.—Light.—Character altered.

Porto di Tortoli.—Light.—The lighthouse on the head of the mole of Porto di Tortoli (Rada di Arbatax) is painted in white and red horizontal bands.

Chart 161a, Sardinia, southern portion.

Page 671.—Secca di Berni.—Light.—The lighthouse has been painted in red and black horizontal bands, instead of black and white, as formerly.

Page 672.—Light.—Carbonara.—The lighthouse dwelling is painted in white and black bands, with "Faro di Cavoli" on the tower.

Plan 564, Maddalena and approaches.

Page 675.—Cape Sant 'Elia light.—Character altered.

Plan 1130, Cagliari bay.

Light-buoy.—*For* "black" *read* "red"; and *for* "*fixed red*" *read* "*flashing red every two seconds.*" (Duration of flash is half a second.)

Buoys.—*For* "a black conical buoy" *read* "two red conical buoys surmounted by cylinders."

Plan of Cagliari harbour on 1130.

Page 676.—Cagliari.—Dredging.—In 1913 dredging was commenced at the entrance to the harbour, both by day and night. At night the dredger shows three lights vertically, the upper and lower *red* and a *white* light between. Probably completed long since.

Lights.—Nuovo molo.—The light-structure and shed are painted in white and black horizontal bands.

Molo Ponenti.—The framework tower and house, from which the light is shown, is painted in red and white horizontal bands.

Plan of San Pietro channel on 1129.

Page 687.—Porto Scuso.—La Ghingetta.—Light.—A light is shown from a trellis tower erected on La Ghingetta islet.

Isolotto Pori (Meli).—The light on La Ghingetta is obscured over Isolotto Pori (Meli).

Page 692.—Secca Grande.—The light on La Ghingetta islet, Porto Scuso, is obscured over the Secca Grande.

Buoys.—Lines 8 and 9 from bottom: *For* "truncated cone" *read* "iron cylindrical buoy, with conical top." *For* "ball" *read* "staff, with two cones, bases together."

Lines 5 and 6 from bottom: Buoy is of same character as the above.

Both buoys are marked "Carloforte S." in white.

Line 2 from bottom: *For* "truncated cone" *read* "iron cylindrical buoys, with conical tops."

Line 1 from bottom: *For* "ball" *read* "staffs, each carrying white cones, bases together, marked 'Carloforte N.'"

Page 693.—Line 3: *Delete*, and *substitute*:—

A cylindrical buoy, with its upper part conical, surmounted by a staff and ball, painted in black and red horizontal stripes, and marked "Marmi," surmounted by a red ball.

Line 6: Secca del Palo buoy is a cylindrical buoy, with conical top, painted in black and red stripes, and marked "Palo," with a ball as topmark.

Plan on 1129.

Page 695.—Directions.—The light on La Ghingetta islet, Porto Scuso, is obscured over the Secca Grande.

Plan of Gulf of Oristano on 1128.

Page 699.—Capo San Marco.—A lighthouse is built on Capo San Marco (1914). Light not yet established.

Chart 161b, Sardinia, northern portion.

Page 702.—Porto di Bosa.—Dredging was commenced in 1913 in the entrance to Porto di Bosa during the daytime only; the dredger is removed at night. Probably completed long since.

Page 705.—Cape Caccia light altered.

Page 707.—PUNTA CAPRARA LIGHT altered.

Oliva. — Mooring buoy. — A mooring buoy has been established at a distance of about $1\frac{6}{10}$ cables eastward of the tower at Oliva.

Plan of Porto Torres on 1128.

Page 709.—Porto Torres.—Harbour works.—Lines 6 and 7: Dredging operations are in progress.

Works are in progress at Port Torres for the construction of an Outer West mole. The head of the new mole will be at a distance of about 220 yards, westward, from the head of the Outer East mole, from thence the mole will extend in a south-westerly direction for a distance of about 370 yards, and thence in a southerly direction to the shore (1916).

Lights.—Outer mole.—The mast and hut at the end of the Eastern Outer mole, from which the light is shown, are painted in white and red horizontal bands.

East mole.—The post at the head of the East mole, from which the light is shown, is painted in white and red horizontal bands.

West mole.—The light-mast at the head of the Inner West mole is painted in white and black horizontal bands, and the light is exhibited at a height of 20 feet.

The characters of the lights at the heads of the East and West moles of the Inner harbour have been altered.

Buoys. — Lines 15 and 16 from bottom: *Omit* from "a white buoy" to "West mole." The shoal has been dredged to 20 feet, and the white buoy has been removed.

Line 14 from bottom: *For* "Porto Vecchio" *read* "Inner harbour."

Page 713.—Bonifacio strait.—Line 13 from top: *For* "539-554" *read* "636-654."

APPENDIX I.

Particulars of Dry Docks, Patent Slips, &c.

Port.	Name of Dock.	Length. On Blocks.	Length. Over all.	Breadth of Entrance.	Depth at M.H.W.S. On Sill.	Depth at M.H.W.S. On Blocks.	Springs rise.	Lifting Power.	Date Built.	Remarks.
		Feet	Feet	Feet	Feet	Feet	Feet	Tons		
Cartagena	Govt. Floating	—	—	—	—	27	—	—	—	Amend particulars.
Port Mahon	.....	Expunge all particulars.								
Oran	Floating Dock	—	328	41	—	—	—	1,200	1914	
Algiers.....	Govt. No. 1	360	455	86½	27½	24 to 28	—	—	—	Amend particulars.
	„ „ 2	188	268	73⅓	18½	17 to 19	—	—	—	Amend particulars.
	Floating Dock	Expunge all particulars.								
Bizerta	Govt. No. 1	—	656	98⅓	31	—	—	—	—	Amend particulars.
	„ „ *2*	—	*820*	*118*	*39¼*	—	—	—	—	*Building*. Expunge previous note.
	„ „ 3	—	319	49⅙	14½	—	—	—	—	Amend particulars.
	„ „ 4	—	656	98⅓	31	—	—	—	—	

APPENDIX VI.

Page 745. — Malta. — Grand harbour. — Article I.: *Add* "When a man-of-war is entering or leaving the Grand harbour a red flag is hoisted at Castille signal station, Custom house flagstaff, or Palace tower flagstaff. Whilst this red flag is hoisted vessels are not permitted to leave their berths or enter the harbour."

APPENDIX VII.

Page 753.—Regulations concerning the temporary closing of French ports for exercises, manœuvres, &c.—Access to French ports may be forbidden or subjected to certain regulations on account of naval manœuvres, exercises, or for any other cause.

Under these circumstances: —

1. A warning signal will be made from a conspicuous point, consisting of three balls, one above the other, by day, and three *red* lights, one above the other, by night.

2. The same signal will be shown from the watch-vessel.

3. Any vessel wishing to go into or out of French waters when one of the above signals is made should, by day, hoist the pilot flag, and await the arrival of the watch-vessel; by night, burn one or more Bengal lights, accompanied by the whistle or siren, and await the arrival of the watch-vessel.

4. At the challenge or a warning shot from the watch-vessel every vessel must stop or heave to.

5. Vessels, in this case, will be subject to a visit by the watch-vessel, which will give them instructions as follows: —

(*a*) If a special examination service is established, where it will be found.

(*b*) If the entrance to the port is closed, and for how long.

(*c*) If any special instructions exist for the navigation of a fixed region.

6. For vessels leaving the port the required instructions will be given in the port by the maritime authorities.

7. Vessels which disobey the above instructions will do so at their own risk and peril, and will be obliged to make good any damage they are the cause of.

INDEX.

Page 43.—Barometer.

Page 786.—Aranci, Baia degli: *For* "658" *read* "659."

Expunge the following: —

Page 820.—"Terranova, Golfo di, Sardinia, torpedo range, 658."

Page 822.—"Torpedo range, Golfo di Terranova, 658."

APPENDIX VI.

Page 745.—Italian Grand Prix [illegible]

[illegible]

APPENDIX VII.

Page 753. Regulations concerning the [illegible] of entry of French ports for [illegible]

§ 1.—Ports [illegible]

[illegible]

[illegible]

Under [illegible]

1. A warning [illegible]

[illegible] of time [illegible]

[illegible] above the [illegible]

The [illegible]

2. A [illegible] to [illegible] of the above [illegible] by day, [illegible] the red flag, [illegible] the arrival of the [illegible] by night, [illegible] one or more red lights [illegible] by the [illegible] or [illegible] and [illegible] [illegible] of the [illegible].

3. At the [illegible] of a warning [illegible] from [illegible] every [illegible] stop or [illegible].

5. Vessels in this case will be subject to a visit by the [illegible] which will give [illegible] instructions as follows:—

(a) If a special examination service is established, [illegible] will be found.

(b) If the entrance to the port is closed, [illegible] long.

(c) If any special [illegible] are [illegible] for the [illegible] of a [illegible] region.

6. For [illegible] reasons, the port [illegible] will be [illegible] in the port by the [illegible] or [illegible].

7. To [illegible] which [illegible] the [illegible] [illegible] and [illegible] be obliged to [illegible] any damage [illegible] the [illegible].

INDEX.

INDEX OF ADDITIONAL NAMES.

The paging refers to the Mediterranean Pilot, Part I.